

**EMERGENCY REGULATIONS
GOVERNOR’S OFFICE OF EMERGENCY SERVICES**

TEXT OF REGULATIONS

California Code of Regulations

Title 19.	Public Safety
Division 2.	Office of Emergency Services
Chapter 4.5	California Accidental Release Prevention (CalARP) Program

Detailed Analysis

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Article 1. General

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Section 2735.1 Purpose.

The federal Accidental Release Prevention Program [Title 40, Code of Federal Regulations, Part 68 (1996)] with certain additions specific to the state shall be the California Accidental Release Prevention (CalARP) Program pursuant to Sections 25531 through 25543.3 of the Health and Safety Code (HSC). Program elements unique to California shall not be used for the purposes of the federal delegation or federal compliance authority.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531.2, 25533, and 25543, Health and Safety Code.

Section 2735.2 Scope.

This chapter sets forth: 1) the list of regulated substances and thresholds, 2) the requirements for owners and operators of stationary sources concerning the prevention of accidental releases, and 3) the accidental release prevention programs approved under Section 112(r) of the federal Clean Air Act (CAA) Amendments of 1990 and mandated under the CalARP program.

The list of substances, threshold quantities, and accident prevention regulations promulgated under this chapter do not in any way limit the general duty provisions under Section 112(r)(1) of the federal CAA.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531, 25532, and 25533, Health and Safety Code; and Section 68.1, Part 68, Code of Federal Regulations.

Section 2735.3 Definitions.

For the purposes of this chapter:

- (a) "AA" means Administering Agency, the local agency responsible to implement the CalARP program. This may include a Certified Unified Program Agency (CUPA).
- (b) "Accidental release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.
- (c) "Administrative controls" mean written procedural mechanisms used for hazard control.

- (d) "Administrator" means the administrator of the United States Environmental Protection Agency (USEPA).
- (e) "AIChE/CCPS" means the American Institute of Chemical Engineers/Center for Chemical Process Safety.
- (f) "API" means the American Petroleum Institute.
- (g) "Article" means a manufactured item, as defined under Section 5189 of Title 8 of the California Code of Regulations (CCR), that is formed to a specific shape or design during manufacture, that has end use functions dependent in whole or in part upon the shape or design during end use, and that does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use.
- (h) "ASME" means the American Society of Mechanical Engineers.
- (i) "CAS" means the Chemical Abstracts Service.
- (j) "CFR" means the Code of Federal Regulations
- (k) "Catastrophic release" means a major uncontrolled emission, fire, or explosion, involving one or more regulated substances that presents an imminent and substantial endangerment to public health and the environment.
- (l) "Classified information," as defined in the Classified Information Procedures Act, Appendix 3 of Section 1(a) of Title 18 of the United States Code, means "any information or material that has been determined by the United States Government pursuant to an executive order, statute, or regulation, to require protection against unauthorized disclosure for reasons of national security."
- (m) "Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in temperature, pressure, or both, and remains liquid at standard conditions.
- (n) "Covered process" means a process that has a regulated substance present in more than a threshold quantity as determined under Section 2770.2 of this chapter.
- (o) "Crude oil" means any naturally occurring, unrefined petroleum liquid.
- (p) "DOT" means the United States Department of Transportation.
- (q) "Environmental receptor" means natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided in Section 2750.2(a), as a result of an accidental release and that can be identified on local United States Geological Survey maps.

- (r) “Field gas” means gas extracted from a production well before the gas enters a natural gas processing plant.
- (s) “Hot work” means work involving electric or gas welding, cutting, brazing, or similar flame or spark-producing operations.
- (t) “Injury” means any effect on a human that results either from direct exposure to toxic concentrations; radiant heat; or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release and that requires medical treatment or hospitalization.
- (u) “Interested persons” means those residents, workers, students and others who would be potentially affected by an accidental or catastrophic release.
- (v) “Major change” means introduction of a new process, process equipment, or regulated substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard.
- (w) “Mechanical integrity” means the process of ensuring that process equipment is fabricated from the proper materials of construction and is properly installed, maintained, and replaced to prevent failures and accidental releases.
- (x) “Medical treatment” means treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician.
- (y) “Mitigation or mitigation system” means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Active mitigation means equipment, devices, or technologies that need human, mechanical, or other energy input to function.
- (z) “Modified stationary source” means a stationary source which has undergone an addition or change which qualifies as a “major change” as defined in Section 2735.3.
- (aa) “NFPA” means the National Fire Protection Association.
- (bb) “Natural gas processing plant” (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A separator, dehydration unit, heater treater, sweetening unit, compressor, or similar equipment shall not be considered a "processing site" unless such equipment is physically located within a natural gas processing plant (gas plant) site. Natural gas processing plant (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A separator, dehydration unit, heater treater, sweetening unit, compressor, or similar equipment shall not be considered a "processing site" unless such equipment is physically located within a natural gas processing plant (gas plant) site.

- (cc) “OES” means the Governor’s Office of Emergency Services.
- (dd) “Offsite” means areas beyond the property boundary of the stationary source, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours.
- (ee) “OSHA” means the Occupational Safety and Health Administration.
- (ff) “Owner or operator” means any person who owns, leases, operates, controls, or supervises a stationary source.
- (gg) “Part 68” means Part 68 of Subpart A of Subchapter C of Chapter I of Title 40 of CFR.
- (hh) “Petroleum refining process unit” means a process unit used in an establishment primarily engaged in petroleum refining as defined in the Standard Industrial Classification code for petroleum refining (Section 2911) and used for the following: (1) Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants; (2) Separating petroleum; or (3) Separating, cracking, reacting, or reforming intermediate petroleum streams. Examples of such units include, but are not limited to, petroleum based solvent units, alkylation units, catalytic hydrotreating, catalytic hydrorefining, catalytic hydrocracking, catalytic reforming, catalytic cracking, crude distillation, lube oil processing, hydrogen production, isomerization, polymerization, thermal processes, and blending, sweetening, and treating processes. Petroleum refining process units include sulfur plants.
- (ii) “Population” means the public.
- (jj) “Process” means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (kk) “Produced water” means water extracted from the earth from an oil or natural gas production well, or that is separated from oil or natural gas after extraction.
- (ll) “Public” means any person except employees or contractors at the stationary source.
- (mm) “Public receptor” means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release.
- (nn) “Qualified person” means a person who is qualified to attest, at a minimum to: (1) the validity and appropriateness of the process hazard analyses (PHA) performed pursuant to

Section 2760.2; (2) the completeness of a risk management plan; and (3) the relationship between the corrective steps taken by the owner or operator following the PHAs and those hazards which were identified in the analyses.

- (oo) “Regulated substance” means any substance, unless otherwise indicated, listed in Section 2770.5 of this chapter.
- (pp) “Replacement in kind” means a replacement that satisfies the design specifications.
- (qq) “RMP” means the risk management plan as described by the component elements identified in Article 3 of this chapter.
- (rr) “SIC” means Standard Industrial Classification.
- (ss) “Stationary source” means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. A stationary source includes transportation containers that are no longer under active shipping papers and transportation containers that are connected to equipment at the stationary source for the purposes of temporary storage, loading, or unloading. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this chapter. Transportation includes, but is not limited to, transportation subject to oversight or regulations under Part 192, 193, or 195 of Title 49 of CFR, or a certification to DOT under Section 60105 of Title 49 of USC. Properties shall not be considered contiguous solely because of a railroad or gas pipeline right-of-way. A stationary source does not include naturally occurring hydrocarbon reservoirs.
- (tt) “Threshold quantity” means the quantity specified for a regulated substance pursuant to Section 2770.5 and determined to be present at a stationary source as specified in Section 2770.2 of this chapter.
- (uu) “Trade secret” means trade secrets as defined in Section 6254.7 of Subdivision (d) of the Government Code and Section 1060 of the Evidence Code and includes information submitted to an administering agency which has been designated by the stationary source as trade secret and which shall not be released by the administering agency except to authorized officers and employees of other governmental agencies, and only in connection with the official duties of that officer or employee pursuant to any law for the protection of health and safety.
- (vv) “Typical meteorological conditions” means the most common temperature, wind speed, cloud cover, and atmospheric stability class, prevailing at the site based on data gathered at or near the site or from a local meteorological station.
- (ww) “Vessel” means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

- (xx) “Worst-case release” means the release of the largest quantity of a regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint defined in Section 2750.2(a) of this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25501 and 25532, Health and Safety Code; and Section 68.3, Part 68, Code of Federal Regulations.

Section 2735.4 Applicability.

- (a) Any owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process listed in Tables 1 and 2 of Section 2770.5, as determined under Section 2770.2 shall comply with provisions of this chapter no later than the latest of the following dates:
- (1) June 21, 1999;
 - (2) Three years after the date on which a regulated substance is first listed under Section 2770.5 of this chapter; or
 - (3) The date on which a regulated substance is first present above a threshold quantity in a process.
- (b) Any owner or operator of a stationary source which has process that has more than a threshold quantity of a regulated substance in a process as listed in Table 3 and does not exceed a threshold quantity in either Table 1 or 2 of Section 2770.5, as determined under Section 2770.2, shall submit an RMP if the AA makes a determination pursuant to Section 25534 of HSC that a stationary source is required to submit an RMP.
- (c) The CalARP program defines three program levels with different levels of requirements depending upon the complexity, accident history and potential impact of releases of regulated substances.
- (d) Program 1 eligibility requirements. A covered process is eligible for Program 1 requirements as provided in Section 2735.5(c) if it meets all of the following requirements:
- (1) For the five years prior to the submission of an RMP, the process has not had an accidental release of a regulated substance where exposure to the substance, its reaction products, overpressure generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance has led to any of the following offsite consequences:
 - (A) Death;
 - (B) Injury; or

- (C) Response or restoration activities for an exposure of an environmental receptor;
- (2) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under Article 4 and Section 2750.3 is less than the distance to any public receptor, as defined in Section 2740.5; and
- (3) Emergency response procedures have been coordinated between the stationary source and local emergency planning and response organizations.
- (e) Program 2 eligibility requirements. A covered process is subject to Program 2 requirements if it does not meet the eligibility requirements of either section (d) or (f).
- (f) Program 3 eligibility requirements. A covered process is subject to Program 3 if the process does not meet the requirements of section (d), and if any of the following conditions apply:
 - (1) The process contains in excess of the threshold quantity of a regulated substance;
 - (2) The process is in SIC Code 2611, 2812, 2819, 2821, 2865, 2869, 2873, 2879, or 2911; or
 - (3) The process is subject to the federal or state OSHA process safety management standards of Section 1910.119 of Title 29 of CFR or Section 5189 of Title 8 of CCR.
- (g) If at any time a covered process no longer meets the eligibility criteria of its Program level, the owner or operator shall comply with the requirements of the new Program level that applies to the process and update the RMP as provided in Section 2745.10.
- (h) The provisions of this part shall not apply to an Outer Continental Shelf ("OCS") source, as defined in Section 55.2 of Title 40 of CFR.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534 and 25536, Health and Safety Code; and Section 68.10, Part 68, Code of Federal Regulations.

Section 2735.5 General Requirements.

- (a) Coordination. The owner or operator of a stationary source shall closely coordinate with the AA to implement the requirements of this chapter and to determine the appropriate level of documentation required for an RMP to comply with Sections 2745.2 through 2745.8 of this chapter. This requirement shall not preclude public access to RMP information. Classified information need not be included in the RMP but shall be made available to the AA to the extent allowable by law. Trade secrets are protected pursuant to Section 25538 of HSC.
- (b) General requirements. The owner or operator of a stationary source subject to this chapter shall submit a single RMP, as provided in Sections 2745.1 to 2745.8. The RMP shall include a registration that reflects all covered processes.

- (c) Program 1 requirements. In addition to meeting the requirements of section (b), the owner or operator of a stationary source with a process eligible for Program 1, as provided in Section 2735.4(c) shall:
- (1) Analyze the worst-case release scenario for the process(es), as provided in Section 2750.3; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in Section 2750.2(a); and submit in the RMP the worst-case release scenario as provided in Section 2745.3(a);
 - (2) Complete the five-year accident history for the process as provided in Section 2750.9 of this chapter and submit it in the RMP as provided in Section 2745.4;
 - (3) Ensure that response actions have been coordinated with local emergency planning and response agencies; and
 - (4) Certify in the RMP the following: "Based on the criteria in Section 2735.4, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is less than the distance to the nearest public receptor: [list process(es)]. Within the past five years, the process(es) has (have) had no accidental release that caused offsite impacts provided in the risk management program Section 2735.4(c)). No additional measures are necessary to prevent offsite impacts from accidental releases. In the event of fire, explosion, or a release of a regulated substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the RMP. The undersigned certifies that, to the best of my knowledge, information, and belief, formed after reasonable inquiry, the information submitted is true, accurate, and complete. (Signature, title, date signed)."
- (d) Program 2 requirements. In addition to meeting the requirements of section (b), the owner or operator of a stationary source with a process subject to Program 2, as provided Section 2734.5(d), shall:
- (1) Develop and implement a management system as provided in Section 2735.6;
 - (2) Conduct a hazard assessment as provided in Sections 2750.1 through 2750.9;
 - (3) Implement the Program 2 prevention steps provided in Sections 2755.1 through 2755.7 or implement the Program 3 prevention steps provided Sections 2760.1 through 2760.12;
 - (4) Develop and implement an emergency response program as provided in Sections 2765.1 to 2765.2; and
 - (5) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in Section 2745.7.

- (e) Program 3 requirements. In addition to meeting the requirements of section (b), the owner or operator of a stationary source with a process subject to Program 3, as provided in Section 2735.4(e) shall:
- (1) Develop and implement a management system as provided in Section 2735.6;
 - (2) Conduct a hazard assessment as provided in Sections 2750.1 through 2750.9;
 - (3) Implement the prevention requirements of Sections 2760.1 through 2760.12;
 - (4) Develop and implement an emergency response program as provided in Sections 2765.1 to 2765.2; and
 - (5) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in Section 2745.6.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533, 25534, 25534.05 and 25538, Health and Safety Code; and Section 68.12, Part 68, Code of Federal Regulations.

Section 2735.6 CalARP Program Management.

- (a) The owner or operator of a stationary source with processes subject to Program 2 or Program 3 shall develop a management system to oversee the implementation of the RMP elements.
- (b) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the RMP elements.
- (c) When responsibility for implementing individual requirements of this chapter is assigned to persons other than the person identified under section (b), the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25532 and 25535, Health and Safety Code; and Section 68.15, Part 68, Code of Federal Regulations.

Section 2735.7 Emergency Information Access

Upon request of a state or local emergency response agency the AA shall provide immediate access to all components of the CalARP program.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25538(c) and 25539, Health and Safety Code.

Article 2. Registration

- 2740.1 State and Federal Registration.
- 2740.2 Locally Required Registration.

Section 2740.1 State and Federal Registration.

- (a) If an RMP is required under Section 2735.4(b), the owner or operator of the stationary source shall complete the registration information required in (c) of this section and submit it with the RMP.
- (b) The owner or operator subject to Section 2735.4(a) shall complete a federal registration form (available from USEPA) and include it in the RMP when submitting the RMP. The form shall address all regulated substances subject to Section 2735.4(a) handled in covered processes and shall include the registration information required in (c) of this section.
- (c) The registration shall include the following data:
 - (1) Stationary source name, street, city, county, state, zip code, latitude, and longitude;
 - (2) The stationary source Dun and Bradstreet number;
 - (3) Name and Dun and Bradstreet number of the corporate parent company;
 - (4) The name, telephone number, and mailing address of the owner or operator;
 - (5) The name and title of the person or position with overall responsibility for RMP elements and implementation;
 - (6) The name, title, telephone number, and 24-hour telephone number of the emergency contact;
 - (7) For each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process, the maximum quantity of each regulated substance or mixture in the process (in pounds) to two significant digits, the SIC code, and the Program level of the process;
 - (8) The stationary source USEPA identifier;
 - (9) The number of full-time employees at the stationary source;
 - (10) Whether the stationary source is subject to Section 5189 of Title 8 of CCR;
 - (11) Whether the stationary source is subject to Part 355 of Title 40 of CFR;
 - (12) Whether the stationary source is subject to an operating permit under Title V of CAA; and

- (13) The date of the last safety inspection of the stationary source by a federal, state, or local government agency and the identity of the inspecting entity.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531, 25534.05(a)(1), and 25533(b), Health and Safety Code; and Section 68.160, Part 68, Code of Federal Regulations.

Section 2740.2 Locally Required Registration

Notwithstanding the registration pursuant to Section 2740.1, the AA may request an earlier registration from a stationary source covered by this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531, 25534.05(a)(1), and 25533(b), Health and Safety Code; and Section 68.160, Part 68, Code of Federal Regulations.

Article 3. Risk Management Plan Submission Requirements and Components

- 2745.1 Submission.
- 2745.2 RMP Review Process.
- 2745.3 Executive Summary.
- 2745.4 Offsite Consequence Analysis.
- 2745.5 Five-year Accident History.
- 2745.6 Program 2 Prevention Program.
- 2745.7 Program 3 Prevention Program.
- 2745.8 Emergency Response Program.
- 2745.9 Certification.
- 2745.10 Updates.
- 2745.11 Covered Process Modification.
- 2745.12 Occupancy Certificate.

Section 2745.1 Submission

- (a) The owner or operator of a stationary source which handles more than a threshold quantity of a regulated substance listed in Table 1 or Table 2 of Section 2770.5 shall submit a single RMP that includes at a minimum the information required by Sections 2745.2 through 2745.8 for all covered processes.
- (1) The single RMP shall be submitted to the appropriate AA.
- (2) Select RMP information shall be submitted in a method and format to a central point as specified by USEPA prior to June 21, 1999. This chapter does not require the owner or operator to submit to USEPA any external event analysis or supplemental information required by the AA unless that analysis or information is required by federal law.

- (b) The owner or operator of a stationary source which handles a regulated substance as listed in Table 3 of Section 2770.5, and is requested by the AA to submit an RMP, shall submit a single RMP to the AA that includes at a minimum the information required by Sections 2745.2 through 2745.8 for all covered processes.
- (c) An owner or operator of a stationary source required to submit an RMP pursuant to section (a), or required to submit an RMP under both sections (a) and (b), shall submit the first RMP no later than the latest of the following dates:
 - (1) June 21, 1999;
 - (2) Three years after the date on which a regulated substance is first listed under Section 2770.5; or
 - (3) The date on which a regulated substance is first present above a threshold quantity in a process.
- (d) An owner or operator of a stationary source required to submit an RMP pursuant to section (b), shall not be required to submit an RMP earlier than 12 months or later than 3 years after the owner or operator has received a notice of that determination from the AA. The RMP shall be submitted to the appropriate AA in accordance with a schedule determined by the AA in compliance with Section 25536(b) of HSC.
- (e) If an economic poison, as defined in Section 12753 of the Food and Agricultural Code, is determined by the AA to pose a regulated substances accident risk, the AA shall first consult with the Department of Food and Agriculture or the county agricultural commissioner to evaluate whether the existing RMP is adequate in relation to the regulated substances accident risk. This paragraph does not prohibit, or limit the authority of an AA to conduct its duties.
- (f) Subsequent submissions of RMPs shall be in accordance with Section 2745.10.
- (g) Notwithstanding the provisions of Sections 2745.2 through 2745.9 the RMP shall exclude classified information. Subject to appropriate procedures to protect such information from public disclosure, classified data or information excluded from the RMP may be made available in a classified annex to the RMP for review by federal and state representatives who have received the appropriate security clearances.
- (h) Upon receipt, the AA shall submit to OES copies of the RMP executive summary and the federal registration.
- (i) Model RMPs, recognized by USEPA, may be used by stationary sources if accepted for use by OES. OES shall consult with the AA regarding the use and acceptance of model RMPs. OES may limit the use, application, or scope of these models or plans.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533.1, 25534, 25535.1, and 25536, Health and Safety Code; and Section 68.150, Part 68, Code of Federal Regulations.

Section 2745.2 RMP Review Process.

(a) The RMP and public review process shall include:

- (1) Consultation and review. The RMP shall be certified complete by a qualified person and the stationary source owner or operator and shall be submitted to the AA. Completeness shall be determined in accordance with Sections 2745.2 through 2745.8. The stationary source shall work closely with the AA to determine that the document contains an appropriate level of detail for the RMP review.
- (2) Initial public notice. The AA shall publish in a local newspaper of general circulation that the RMP has been submitted and the AA has initiated the process for government and public review.
- (3) Deficiency notice. The AA shall review the RMP and provide a notice to the owner or operator of a stationary source of any deficiencies in accordance with Section 25535 (a) of HSC. The AA may authorize the air pollution control district (APCD) or air quality management district (AQMD) to conduct a technical review of the RMP.
 - (A) The owner or operator of the stationary source shall have 60 calendar days from receipt of the notification of deficiencies to make any corrections. An owner or operator of the stationary source may request a one-time 30 calendar day extension to correct deficiencies. At the end of the 60 calendar days, and any extension period if applicable, the stationary source shall resubmit the corrected, revised RMP to the AA. Failure to correct deficiencies during the specified time frame shall subject the owner or operator of the stationary source to the penalties specified in Sections 25540 and 25541 of HSC.
 - (B) If no deficiencies are identified, the AA shall submit the RMP for formal public review.
- (4) Formal public review. Within 15 calendar days after the AA determines there are no deficiencies in the information, the AA shall make the RMP available to the public for review and comment by publishing a notice in a local newspaper of general circulation. The notice shall describe the RMP and state a location where it may be reviewed. Interested persons and organizations who have expressed an interest shall be notified directly. The public shall have 45 calendar days to comment following the publication date of the notice. The AA shall review all public comments.
- (5) Completeness review. The completeness review shall be conducted by the AA at the end of the formal public review period. The AA shall take the public comments into consideration during the completeness review. The AA shall determine if all the necessary elements are contained in the RMP document. The AA shall consider

standard application of engineering and scientific principles, site specific characteristics, technical accuracy, severity of offsite consequences, and other information in the possession of or reviewed by the AA. The completeness review may include inspections and onsite document review of records and data which will not be in the possession of the AA. The completeness review shall be completed by the AA as follows: stationary source with only a Program 1 or Program 2 process within 36 months; and stationary source with only a Program 3 process within 24 months. The completeness review does not include time for corrections of deficiencies pursuant to section (3)(A).

- (6) Inspection or audit authority. Nothing in this section shall preclude the authority of an AA to inspect or audit a stationary source.
- (7) Public access. The public shall have access to the RMP, including any electronic data developed as part of the USEPA reporting requirements. Classified information need not be included. Trade secrets are protected pursuant to Section 25538 of HSC.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531.1, 25534.5, 25535, 25535.2 and 25538, Health and Safety Code.

Section 2745.3 Executive Summary.

The owner or operator shall provide in the RMP an executive summary that includes a brief description of the following elements:

- (a) The accidental release prevention and emergency response policies at the stationary source;
- (b) The stationary source and regulated substances handled;
- (c) The worst-case release scenario(s) and the alternative release scenario(s), including administrative controls and mitigation measures to limit the distances for each reported scenario;
- (d) The general accidental release prevention program and chemical-specific prevention steps;
- (e) The five-year accident history;
- (f) The emergency response program; and
- (g) Planned changes to improve safety.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.155, Part 68, Code of Federal Regulations.

Section 2745.4 Offsite Consequence Analysis.

- (a) The owner or operator shall submit in the RMP information:

- (1) Program 1 processes: One worst-case release scenario for each Program 1 process; and
 - (2) Program 2 and 3 processes: One worst-case release scenario to represent all regulated toxic substances held above the threshold quantity and one worst-case release scenario to represent all regulated flammable substances held above the threshold quantity. If additional worst-case scenarios for toxics or flammables are required by Section 2750.3(a)(2)(C), the owner or operator shall submit the same information on the additional scenario(s). The owner or operator shall also submit information on one alternative release scenario for each regulated toxic substance held above the threshold quantity and one alternative release scenario to represent all regulated flammable substances held above the threshold quantity.
- (b) The owner or operator shall submit the following data:
- (1) Chemical name;
 - (2) Physical state (toxics only);
 - (3) Basis of results (give model name if used);
 - (4) Scenario (explosion, fire, toxic gas release, or liquid spill and vaporization);
 - (5) Quantity released in pounds;
 - (6) Release rate;
 - (7) Release duration;
 - (8) Wind speed and atmospheric stability class (toxics only);
 - (9) Topography (toxics only);
 - (10) Distance to endpoint;
 - (11) Public and environmental receptors within the distance;
 - (12) Passive mitigation considered; and
 - (13) Active mitigation considered (alternative releases only).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531.1 and 25534.05, Health and Safety Code; and Section 68.165, Part 68, Code of Federal Regulations.

Section 2745.5 Five-year Accident History.

The owner or operator shall submit in the RMP the information provided in Section 2750.9(b) on each accident covered by Section 2750.9(a).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25543.1, Health and Safety Code; and Section 68.168, Part 68, Code of Federal Regulations.

Section 2745.6 Program 2 Prevention Program.

- (a) For each Program 2 process, the owner or operator shall provide in the RMP the information indicated in sections (b) through (l). If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.
- (b) The SIC code for the process.
- (c) The name(s) of the chemical(s) covered.
- (d) The date of the most recent review or revision of the safety information and a list of federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement.
- (e) The date of completion of the most recent hazard review or update.
 - (1) The expected date of completion of any changes resulting from the hazard review;
 - (2) Major hazards identified;
 - (3) Process controls in use;
 - (4) Mitigation systems in use;
 - (5) Monitoring and detection systems in use; and
 - (6) Changes since the last hazard review.
- (f) The date of the most recent review or revision of operating procedures.
- (g) The date of the most recent review or revision of training programs;
 - (1) The type of training provided--classroom, classroom plus on the job, on the job; and
 - (2) The type of competency testing used.
- (h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

- (i) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit.
- (j) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.
- (k) The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.
- (l) The owner or operator shall submit the following external events analysis information:
 - (1) The types of natural and human caused external events considered in PHA Section 2760.2 or Hazard Review Section 2755.2.
 - (2) The magnitude or scope of each external event considered. If not known, the owner or operator of the stationary source shall work closely with their AA to determine what is required. If seismic events are applicable, the parameters used in the consideration of the seismic analysis and to what edition of the Uniform Building Code the process was designed.
 - (3) For each external event, with a potential to create a release of a regulated substance that will reach an endpoint offsite, apply sections (e)(1) through (e)(6).
 - (4) The date of the most recent field verification that equipment is installed and maintained as designed.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.170, Part 68, Code of Federal Regulations.

Section 2745.7 Program 3 Prevention Program.

- (a) For each Program 3 process, the owner or operator shall provide the information indicated in sections (b) through (p). If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.
- (b) The SIC code for the process.
- (c) The name(s) of the substance(s) covered.
- (d) The date on which the safety information was last reviewed or revised.
- (e) The date of completion of the most recent PHA or update and the technique used.
 - (1) The expected date of completion of any changes resulting from the PHA;

- (2) Major hazards identified;
 - (3) Process controls in use;
 - (4) Mitigation systems in use;
 - (5) Monitoring and detection systems in use; and
 - (6) Changes since the last PHA.
- (f) The date of the most recent review or revision of operating procedures.
 - (g) The date of the most recent review or revision of training programs.
 - (1) The type of training provided--classroom, classroom plus on the job, on the job; and
 - (2) The type of competency testing used.
 - (h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.
 - (i) The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures.
 - (j) The date of the most recent pre-startup review.
 - (k) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit;
 - (l) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation;
 - (m) The date of the most recent review or revision of employee participation plans;
 - (n) The date of the most recent review or revision of hot work permit procedures;
 - (o) The date of the most recent review or revision of contractor safety procedures;
 - (p) The date of the most recent evaluation of contractor safety performance; and
 - (q) The owner or operator shall submit the following external events analysis information:
 - (1) The types of natural and human caused external events considered in PHA Section 2760.2 or Hazard Review Section 2755.2.
 - (2) The magnitude or scope of each external event considered. If not known, the stationary source shall work closely with their AA to determine what is required. If seismic events

are applicable, the parameters used in the consideration of the seismic analysis and to what edition of the Uniform Building Code the process was designed.

- (3) For each external event, with a potential to create a release of a regulated substance that will reach an endpoint offsite, apply sections (e)(1) through (e)(6).
- (4) The date of the most recent field verification that equipment is installed and maintained as designed.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.175, Part 68, Code of Federal Regulations.

Section 2745.8 Emergency Response Program.

- (a) The owner or operator shall provide in the RMP the following information:
 - (1) Do you have a written emergency response plan?
 - (2) Does the plan include specific actions to be taken in response to a accidental releases of a regulated substance?
 - (3) Does the plan include procedures for informing the public and local agencies responsible for responding to accidental releases?
 - (4) Does the plan include information on emergency health care?
 - (5) The date of the most recent review or update of the emergency response plan;
 - (6) The date of the most recent emergency response training for employees.
- (b) The owner or operator shall provide the name and telephone number of the local agency with which the plan is coordinated.
- (c) The owner or operator shall list other federal or state emergency plan requirements to which the stationary source is subject.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.180, Part 68, Code of Federal Regulations.

Section 2745.9 Certification.

- (a) For Program 1 processes, the owner or operator shall submit in the RMP the certification statement provided in Section 2735.5(b)(4).

- (b) For all other covered processes, the owner or operator shall submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.185, Part 68, Code of Federal Regulations.

Section 2745.10 Updates.

- (a) The owner or operator of a stationary source which handles a regulated substance listed in Table 1 or Table 2 or in Section 2770.5 shall review and update the RMP as specified in sections (a)(1) through (a)(7) and submit it in a method and format to a central point specified by USEPA and to the AA prior to June 21, 1999. The owner or operator of a stationary source shall revise and update the RMP submitted under Section 2745.1 as follows:
 - (1) Within five years of its initial submission or most recent update required by sections (a)(2) through (a)(7), whichever is later;
 - (2) No later than three years after a newly regulated substance is first listed by USEPA;
 - (3) No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;
 - (4) No later than the date on which a regulated substance is first present above a threshold quantity in a new process;
 - (5) Within six months of a change that requires a revised PHA or hazard review;
 - (6) Within six months of a change that requires a revised offsite consequence analysis as provided in section 2750.7; and
 - (7) Within six months of a change that alters the Program level that applied to any covered process.
- (b) The owner or operator of a stationary source which handles state regulated substances in Section 2770.5 on Table 3 shall review and update the RMP as specified in sections (b)(1) through (b)(7) and submit it to the AA according to a schedule determined by the AA. The owner or operator of a stationary source shall revise and update the RMP submitted under Section 2745.1 as follows:
 - (1) Within five years of its initial submission or most recent update required by sections (b)(2) through (b)(7), whichever is later;
 - (2) No later than three years after a newly regulated substance is first listed by OES;

- (3) No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;
 - (4) No later than the date on which a regulated substance is first present above a threshold quantity in a new process;
 - (5) Within six months of a change that requires a revised PHA or hazard review;
 - (6) Within six months of a change that requires a revised offsite consequence analysis as provided in Section 2750.7; and
 - (7) Within six months of a change that alters the Program level that applied to any covered process.
- (c) If a stationary source is no longer subject to this chapter, the owner or operator shall submit a revised registration pursuant to Section 2740.2 to USEPA within six months indicating that the stationary source is no longer covered. A copy of the revised registration will also be submitted to the AA.
- (d) Revised RMPs shall be subject to the public review process outlined in Section 2745.2.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.190, Part 68, Code of Federal Regulations.

Section 2745.11 Covered Process Modification.

- (a) When an owner or operator intends to make a modification to a stationary source relating to a covered process and the modification may result in a significant increase in either, (i) the amount of regulated substances handled at the stationary source as compared to the amount of regulated substances identified in the stationary source's RMP; or (ii) the risk of handling a regulated substance as compared to the amount of risk identified in the stationary source's RMP, then the owner or operator shall do all of the following:
- (1) Where reasonably possible, notify the AA in writing of the owner or operator's intent to modify the stationary source at least five calendar days before implementing any modifications. As part of the notification process, the owner or operator shall consult with the AA when determining whether the RMP should be reviewed and revised. Where prenotification is not reasonably possible, the owner or operator shall provide written notice to the AA no later than 48 hours following the modification.
 - (2) Establish procedures to manage the proposed modification, which shall be substantially similar to the procedures specified in Articles 3 and 4 of this chapter, and notify the AA that the procedures have been established.

- (b) The owner or operator of the stationary source shall revise the appropriate documents, as required pursuant to section (a), expeditiously, but not later than 60 days from the date of the stationary source modification.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25543.2, Health and Safety Code.

Section 2745.12 Occupancy Certificate.

New or modified stationary sources shall comply with Section 65850.2(b) of the Government Code prior to the issuance of a certificate of occupancy.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25534.2, Health and Safety Code.

Article 4. Hazard Assessment.

- 2750.1 Applicability.
- 2750.2 Offsite Consequence Analysis Parameters.
- 2750.3 Worst-Case Release Scenario Analysis.
- 2750.4 Alternative Release Scenario Analysis.
- 2750.5 Defining Offsite Impacts to the Population.
- 2750.6 Defining Offsite Impacts to the Environment.
- 2750.7 Offsite Consequence Analysis Review and Update.
- 2750.8 Offsite Consequence Analysis Documentation.
- 2750.9 Five-year Accident History.

Section 2750.1 Applicability.

The owner or operator of a stationary source subject to this chapter shall prepare a worst-case scenario analysis as provided in Section 2750.3 of this chapter and complete the five-year accident history as provided in Section 2750.9. The owner or operator of a Program 2 or 3 process must comply with all sections in this article for these processes.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.20, Part 68, Code of Federal Regulations.

Section 2750.2 Offsite Consequence Analysis Parameters.

- (a) Endpoints. For analyses of offsite consequences, the following endpoints shall be used:
- (1) Toxics. The toxic endpoints provided in Appendix A of this chapter.
 - (2) Flammables. The endpoints for flammables vary according to the scenarios studied:
 - (A) Explosion. An overpressure of 1 psi.

- (B) Radiant heat/exposure time. A radiant heat of 5 kw/m² for 40 seconds.
- (C) Lower flammability limit. A lower flammability limit as provided in NFPA documents or other generally recognized sources.
- (b) Wind speed/atmospheric stability class. For the worst-case release analysis, the owner or operator shall use a wind speed of 1.5 meters per second and F atmospheric stability class. If the owner or operator can demonstrate that local meteorological data applicable to the stationary source show a higher minimum wind speed or less stable atmosphere at all times during the previous three years, these minimums may be used. For analysis of alternative scenarios, the owner or operator may use the typical meteorological conditions for the stationary source.
- (c) Ambient temperature/humidity. For worst-case release analysis of a regulated toxic substance, the owner or operator shall use the highest daily maximum temperature in the previous three years and average humidity for the site, based on temperature/humidity data gathered at the stationary source or at a local meteorological station; an owner or operator using the RMP Offsite Consequence Analysis Guidance may use 25 degrees centigrade and 50 percent humidity as values for these variables. For analysis of alternative scenarios, the owner or operator may use typical temperature/humidity data gathered at the stationary source or at a local meteorological station.
- (d) Height of release. The worst-case release of a regulated toxic substance shall be analyzed assuming a ground level (0 feet) release. For an alternative scenario analysis of a regulated toxic substance, release height may be determined by the release scenario.
- (e) Surface roughness. The owner or operator shall use either urban or rural topography, as appropriate. Urban means that there are many obstacles in the immediate area; obstacles include buildings or trees. Rural means there are no buildings in the immediate area and the terrain is generally flat and unobstructed.
- (f) Dense or neutrally buoyant gases. The owner or operator shall ensure that tables or models used for dispersion analysis of regulated toxic substances appropriately account for gas density.
- (g) Temperature of released substance. For worst case, liquids other than gases liquefied by refrigeration only shall be considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for the stationary source, or at process temperature, whichever is higher. For alternative scenarios, substances may be considered to be released at a process or ambient temperature that is appropriate for the scenario.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.22, Part 68, Code of Federal Regulations.

Section 2750.3 Worst-Case Release Scenario Analysis.

- (a) The owner or operator shall analyze and report in the RMP:
 - (1) For Program 1 processes, one worst-case release scenario for each Program 1 process;
 - (2) For Program 2 and 3 processes:
 - (A) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint provided in Appendix A of this chapter resulting from an accidental release of regulated toxic substances from covered processes under worst-case conditions defined in Section 2750.2;
 - (B) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint defined in Section 2750.2(a) resulting from an accidental release of regulated flammable substances from covered processes under worst-case conditions defined in Section 2750.2; and
 - (C) Additional worst-case release scenarios for a hazard class if a worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under sections (a)(2)(A) or (a)(2)(B).
- (b) Determination of worst-case release quantity. The worst-case release quantity shall be the greater of the following:
 - (1) For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity; or
 - (2) For substances in pipes, the greatest amount in a pipe, taking into account administrative controls that limit the maximum quantity.
- (c) Worst-case release scenario--toxic gases.
 - (1) For regulated toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under section (b), is released as a gas over 10 minutes. The release rate shall be assumed to be the total quantity divided by 10 unless passive mitigation systems are in place.
 - (2) For gases handled as refrigerated liquids at ambient pressure:
 - (A) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 centimeter or less, the owner or operator shall assume that the substance is released as a gas in 10 minutes;
 - (B) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 cm, the owner or operator may assume that the quantity in the

vessel or pipe, as determined under section (b), is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in section (d).

(d) Worst-case release scenario--toxic liquids.

(1) For regulated toxic substances that are normally liquids at ambient temperature, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under section (b), is spilled instantaneously to form a liquid pool.

(A) The surface area of the pool shall be determined by assuming that the liquid spreads to 1 centimeter deep unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. Where passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate.

(B) If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

(2) The volatilization rate shall account for the highest daily maximum temperature occurring in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution.

(3) The rate of release to air shall be determined from the volatilization rate of the liquid pool. The owner or operator may use the methodology in the RMP Offsite Consequence Analysis Guidance or any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(e) Worst-case release scenario--flammables. The owner or operator shall assume that the quantity of the substance, as determined under section (b), vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT-equivalent methods.

(f) Parameters to be applied. The owner or operator shall use the parameters defined in Section 2750.2 to determine distance to the endpoints. The owner or operator may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the AA access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

- (g) Consideration of passive mitigation. Passive mitigation systems may be considered for the analysis of worst case provided that the mitigation system is capable of withstanding the release event triggering the scenario and would still function as intended.
- (h) Factors in selecting a worst-case scenario. Notwithstanding the provisions of section (b), the owner or operator shall select as the worst case for flammable regulated substances or the worst case for regulated toxic substances, a scenario based on the following factors if such a scenario would result in a greater distance to an endpoint defined in Section 2750.2(a) beyond the stationary source boundary than the scenario provided under section (b):
 - (1) Smaller quantities handled at higher process temperature or pressure; and
 - (2) Proximity to the boundary of the stationary source.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.25, Part 68, Code of Federal Regulations.

Section 2750.4 Alternative Release Scenario Analysis.

- (a) The number of scenarios. The owner or operator shall identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes.
- (b) Scenarios to consider.
 - (1) For each scenario required under section (a), the owner or operator shall select a scenario:
 - (A) That is more likely to occur than the worst-case release scenario under Section 2750.3; and
 - (B) That will reach an endpoint offsite, unless no such scenario exists.
 - (2) Release scenarios considered should include, but are not limited to, the following, where applicable:
 - (A) Transfer hose releases due to splits or sudden hose uncoupling;
 - (B) Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds;
 - (C) Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure;
 - (D) Vessel overfilling and spill, or over pressurization and venting through relief valves or rupture disks; and

- (E) Shipping container mishandling and breakage or puncturing leading to a spill.
- (c) Parameters to be applied. The owner or operator shall use the parameters defined in Section 2750.2 to determine distance to the endpoints. The owner or operator may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the AA access to the model and describes model features and differences from publicly available models to local emergency planners upon request.
- (d) Consideration of mitigation. Active and passive mitigation systems may be considered provided they are capable of withstanding the event that triggered the release and would still be functional.
- (e) Factors in selecting scenarios. The owner or operator shall consider the following in selecting alternative release scenarios:
- (1) The five-year accident history provided in Section 2750.9; and
 - (2) Failure scenarios identified under Section 2755.2 or 2760.2.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.28, Part 68, Code of Federal Regulations.

Section 2750.5 Defining Offsite Impacts to the Population.

- (a) The owner or operator shall estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 2750.2(a).
- (b) Population to be defined. Population shall include residential population. The presence of institutions (schools, hospitals, prisons), parks and recreational areas, and major commercial, office, and industrial buildings shall be noted in the RMP.
- (c) Data sources acceptable. The owner or operator may use the most recent Census data, or other more accurate information if it is available, to estimate the population potentially affected.
- (d) Level of accuracy. Population shall be estimated to two significant digits.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.30, Part 68, Code of Federal Regulations.

Section 2750.6 Defining Offsite Impacts to the Environment.

- (a) The owner or operator shall list in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 2750.2(a).
- (b) Data sources acceptable. The owner or operator may rely on information provided on local United States Geological Survey (USGS) maps or on any data source containing USGS data to identify environmental receptors.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.33, Part 68, Code of Federal Regulations.

Section 2750.7 Offsite Consequence Analysis Review and Update.

- (a) The owner or operator shall review and update the offsite consequence analyses at least once every five years.
- (b) If changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall complete a revised analysis within six months of the change and submit a revised RMP as provided Section 2745.10.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.36, Part 68, Code of Federal Regulations.

Section 2750.8 Offsite Consequence Analysis Documentation.

The owner or operator shall maintain the following records on the offsite consequence analyses:

- (a) For worst-case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection. Assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.
- (b) For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios. Assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.
- (c) Documentation of estimated quantity released, release rate, and duration of release.
- (d) Methodology, including the model used to determine distance to endpoints.
- (e) Data used to estimate population and environmental receptors potentially affected.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.39, Part 68, Code of Federal Regulations.

Section 2750.9 Five-year Accident History.

- (a) The owner or operator shall include in the five-year accident history including all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or know offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.
- (b) Data required. For each accidental release included, the owner or operator shall report the following information:
 - (1) Date, time, and approximate duration of the release;
 - (2) Regulated substance(s) released;
 - (3) Estimated quantity released in pounds;
 - (4) The type of release event and its source;
 - (5) Weather conditions, if known;
 - (6) On-site impacts;
 - (7) Known offsite impacts;
 - (8) Initiating event and contributing factors if known;
 - (9) Whether offsite responders were notified if known; and
 - (10) Operational or process changes that resulted from investigation of the release.
- (c) Level of accuracy. Numerical estimates shall be provided to two significant digits.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.42, Part 68, Code of Federal Regulations.

Article 5. Program 2 Prevention Program

- 2755.1 Safety Information.
- 2755.2 Hazard Review.
- 2755.3 Operating Procedures.
- 2755.4 Training.
- 2755.5 Maintenance.
- 2755.6 Compliance Audits.

Section 2755.1 Safety Information.

- (a) The owner or operator shall compile and maintain the following up-to-date safety information related to the regulated substances, processes, and equipment:
 - (1) Material Safety Data Sheets that meet the requirements of Section 5189 of Title 8 of CCR;
 - (2) Maximum intended inventory of equipment in which the regulated substances are stored or processed;
 - (3) Safe upper and lower temperatures, pressures, flows, and compositions;
 - (4) Equipment specifications; and
 - (5) Codes and standards used to design, build, and operate the process.
- (b) The owner or operator shall ensure that the process is designed in compliance with recognized and generally accepted good engineering practices. Compliance with federal or state regulations that address industry-specific safe design or with industry-specific design codes and standards may be used to demonstrate compliance with this section.
- (c) The owner or operator shall update the safety information if a major change occurs that makes the information inaccurate.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.48, Part 68, Code of Federal Regulations.

Section 2755.2 Hazard Review.

- (a) The owner or operator shall conduct a review of the hazards associated with the regulated substances, process, and procedures. The review shall identify the following:
 - (1) The hazards associated with the process and regulated substances;
 - (2) Opportunities for equipment malfunctions or human errors that could cause an accidental release;
 - (3) The safeguards used or needed to control the hazards or prevent equipment malfunction or human error; and
 - (4) Any steps used or needed to detect or monitor releases.

- (b) The owner or operator of a stationary source shall consult with the AA to decide which hazard review methodology is best suited to determine and evaluate the hazards of the process being analyzed.
- (c) The owner or operator may use checklists, if acceptable to the AA, developed by persons or organizations knowledgeable about the process and equipment as a guide to conducting the review. For processes designed to meet industry standards or federal or state design rules, the hazard review shall, by inspecting all equipment, determine whether the process is designed, fabricated, and operated in accordance with the applicable standards or rules.
- (d) The hazard review shall include the consideration of applicable external events, including seismic events.
- (e) The owner or operator shall document the results of the hazard review and ensure that problems identified are resolved in a timely manner.
- (f) The hazard review shall be updated at least once every five years. The owner or operator shall also conduct reviews whenever a major change in the process occurs. All issues identified in the hazard review shall be resolved before startup of the changed process.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.50, Part 68, Code of Federal Regulations.

Section 2755.3 Operating Procedures.

- (a) The owner or operator shall prepare written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process consistent with the safety information for that process. Operating procedures or instructions provided by equipment manufacturers or developed by persons or organizations knowledgeable about the process and equipment may be used as a basis for a stationary source's operating procedures.
- (b) The procedures shall address the following:
 - (1) Initial startup;
 - (2) Normal operations;
 - (3) Temporary operations;
 - (4) Emergency shutdown and operations;
 - (5) Normal shutdown;
 - (6) Startup following a normal or emergency shutdown or a major change that requires a hazard review;

- (7) Consequences of deviations and steps required to correct or avoid deviations; and
- (8) Equipment inspections.
- (c) The owner or operator shall ensure that the operating procedures are updated, if necessary, whenever a major change occurs and prior to startup of the changed process.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.52, Part 68, Code of Federal Regulations.

Section 2755.4 Training.

- (a) The owner or operator shall ensure that each employee presently operating a process, and each employee newly assigned to a covered process has been trained or tested competent in the operating procedures provided in Section 2755.3 that pertain to their duties. For those employees already operating a process on June 21, 1999, the owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.
- (b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees operating the process, shall determine the appropriate frequency of refresher training.
- (c) The owner or operator may use training conducted under federal or state regulations or under industry-specific standards or codes or training conducted by covered process equipment vendors to demonstrate compliance with this section to the extent that the training meets the requirements of this section.
- (d) The owner or operator shall ensure that operators are trained in any updated or new procedures prior to startup of a process after a major change.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.54, Part 68, Code of Federal Regulations.

Section 2755.5 Maintenance.

- (a) The owner or operator shall prepare and implement procedures to maintain the on-going mechanical integrity of the process equipment. The owner or operator may use procedures or instructions provided by covered process equipment vendors or procedures in federal or state regulations or industry codes as the basis for stationary source maintenance procedures.
- (b) The owner or operator shall train or cause to be trained each employee involved in maintaining the on-going mechanical integrity of the process. To ensure that the employee can perform the job tasks in a safe manner, each such employee shall be trained in the hazards

of the process, in how to avoid or correct unsafe conditions, and in the procedures applicable to the employee's job tasks.

- (c) Any maintenance contractor shall ensure that each contract maintenance employee is trained to perform the maintenance procedures developed under section (a).
- (d) The owner or operator shall perform or cause to be performed inspections and tests on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, and prior operating experience.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.56, Part 68, Code of Federal Regulations.

Section 2755.6 Compliance Audits.

- (a) The owner or operator shall certify that they have evaluated compliance with the provisions of this section at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed.
- (b) The compliance audit shall be conducted by at least one person knowledgeable in the process.
- (c) The owner or operator shall develop a report of the audit findings.
- (d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit and document that deficiencies have been corrected.
- (e) The owner or operator shall retain the two most recent compliance audit reports. This requirement does not apply to any compliance audit report that is more than five years old.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.58, Part 68, Code of Federal Regulations.

Section 2755.7 Incident Investigation.

- (a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in, a catastrophic release.
- (b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.
- (c) A summary shall be prepared at the conclusion of the investigation which includes at a minimum:
 - (1) Date of incident;

- (2) Date investigation began;
 - (3) A description of the incident;
 - (4) The factors that contributed to the incident; and,
 - (5) Any recommendations resulting from the investigation.
- (d) The owner or operator shall promptly address and resolve the investigation findings and recommendations. Resolutions and corrective actions shall be documented.
 - (e) The findings shall be reviewed with all affected personnel whose job tasks are affected by the findings.
 - (f) Investigation summaries shall be retained for five years.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.60, Part 68, Code of Federal Regulations.

Article 6. Program 3 Prevention Program

2760.1	Process Safety Information.
2760.2	Process Hazard Analysis.
2760.3	Operating Procedures.
2760.4	Training.
2760.5	Mechanical Integrity.
2760.6	Management of Change.
2760.7	Pre-Startup Review.
2760.8	Compliance Audits.
2760.9	Incident Investigation.
2760.10	Employee Participation.
2760.11	Hot Work Permit.
2760.12	Contractors.

Section 2760.1 Process Safety Information.

- (a) In accordance with the schedule set forth in Section 2760.2, the owner or operator shall complete a compilation of written process safety information before conducting any PHA required by the rule. The compilation of written process safety information is to enable the owner or operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.

- (b) Information pertaining to the hazards of the regulated substances in the process. This information shall consist of at least the following:
 - (1) Toxicity information;
 - (2) Permissible exposure limits;
 - (3) Physical data;
 - (4) Reactivity data;
 - (5) Corrosivity data;
 - (6) Thermal and chemical stability data; and
 - (7) Hazardous effects of inadvertent mixing of different materials that could foreseeably occur.

NOTE TO SECTION (b): Material Safety Data Sheets meeting the requirements of Section 5189 of Title 8 of CCR may be used to comply with this requirement to the extent they contain the information required by this subsection.

- (c) Information pertaining to the technology of the process.
 - (1) Information concerning the technology of the process shall include at least the following:
 - (A) A block flow diagram or simplified process flow diagram;
 - (B) Process chemistry;
 - (C) Maximum intended inventory;
 - (D) Safe upper and lower limits for such items as temperatures, pressures, flows or compositions; and,
 - (E) An evaluation of the consequences of deviations.
 - (2) Where the original technical information no longer exists, such information may be developed in conjunction with the PHA in sufficient detail to support the analysis.
- (d) Information pertaining to the equipment in the process.
 - (1) Information pertaining to the equipment in the process shall include:
 - (A) Materials of construction;
 - (B) Piping and instrument diagrams (P&ID's);

- (C) Electrical classification;
 - (D) Relief system design and design basis;
 - (E) Ventilation system design;
 - (F) Design codes and standards employed;
 - (G) Material and energy balances for processes built after June 21, 1999; and
 - (H) Safety systems (e.g. interlocks, detection or suppression systems).
- (2) The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.
 - (3) For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.65, Part 68, Code of Federal Regulations.

Section 2760.2 Process Hazard Analysis.

- (a) The owner or operator shall perform an initial process hazard analysis (PHA) (hazard evaluation) on processes covered by this chapter. The PHA shall be appropriate to the complexity of the process and shall identify, evaluate, and control the hazards involved in the process. The owner or operator shall determine and document the priority order for conducting PHAs based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. The PHA shall be conducted as soon as possible, but not later than June 21, 1999. Notwithstanding section (c), PHAs completed to comply with Section 5189 of Title 8 of CCR are acceptable as initial PHAs. These PHAs shall be updated and revalidated, based on their completion date.
- (b) The owner or operator shall use one or more of the following methodologies that are appropriate to determine and evaluate the hazards of the process being analyzed.
 - (1) What-If;
 - (2) Checklist;
 - (3) What-If / Checklist;
 - (4) Hazard and Operability Study (HAZOP);

- (5) Failure Mode and Effects Analysis (FMEA);
 - (6) Fault Tree Analysis; or
 - (7) An appropriate equivalent methodology.
- (c) The PHA shall address:
- (1) The hazards of the process;
 - (2) The identification of any previous incident which had a likely potential for catastrophic consequences;
 - (3) Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases. (Acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors.);
 - (4) Consequences of failure of engineering and administrative controls;
 - (5) Stationary source siting;
 - (6) Human factors;
 - (7) A qualitative evaluation of a range of the possible safety and health effects of failure of controls; and
 - (8) The PHA shall include the consideration of external events, including seismic events, if applicable. PHAs completed for other programs where external events were not considered shall be updated to include external events.
- (d) The PHA shall be performed by a team with expertise in engineering and process operations, and the team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific PHA methodology being used.
- (e) The owner or operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.
- (f) At least every five years after the completion of the initial PHA, the PHA shall be updated and revalidated by a team meeting the requirements in section (d), to assure that the PHA is consistent with the current process. Notwithstanding section (c), updated and revalidated

PHA completed to comply with Section 5189 of Title 8 of CCR are acceptable to meet the requirements of this section.

- (g) The owner or operator shall retain PHAs and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in section (e) for the life of the process.
- (h) Stationary sources shall work closely with AAs in deciding which PHA methodology is best suited to determine the hazards of the process being analyzed.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.67, Part 68, Code of Federal Regulations.

Section 2760.3 Operating Procedures.

- (a) The owner or operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements.
 - (1) Steps for each operating phase:
 - (A) Initial startup;
 - (B) Normal operations;
 - (C) Temporary operations;
 - (D) Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner.
 - (E) Emergency operations;
 - (F) Normal shutdown; and
 - (G) Startup following a turnaround, or after an emergency shutdown.
 - (2) Operating limits:
 - (A) Consequences of deviation; and
 - (B) Steps required to correct or avoid deviation.
 - (3) Safety and health considerations:
 - (A) Properties of, and hazards presented by, the chemicals used in the process;

- (B) Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment;
 - (C) Control measures to be taken if physical contact or airborne exposure occurs;
 - (D) Quality control for raw materials and control of hazardous chemical inventory levels; and,
 - (E) Any special or unique hazards.
- (4) Safety systems and their functions.
- (b) Operating procedures shall be readily accessible to employees who work in or maintain a process.
 - (c) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.
 - (d) The owner or operator shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.69, Part 68, Code of Federal Regulations.

Section 2760.4 Training.

- (a) Initial training.
 - (1) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in Section 2760.3. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.
 - (2) In lieu of initial training for those employees already involved in operating a process on June 21, 1999 an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.
- (b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the

employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

- (c) Training documentation. The owner or operator shall ascertain that each employee involved in operating a process has received and understood the training required by this section. The owner or operator shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.71, Part 68, Code of Federal Regulations.

Section 2760.5 Mechanical Integrity.

- (a) Application. Sections (b) through (f) of this section apply to the following process equipment:
 - (1) Pressure vessels and storage tanks;
 - (2) Piping systems (including piping components such as valves);
 - (3) Relief and vent systems and devices;
 - (4) Emergency shutdown systems;
 - (5) Controls (including monitoring devices and sensors, alarms, and interlocks) ; and
 - (6) Pumps.
- (b) Written procedures. The owner or operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.
- (c) Training for process maintenance activities. The owner or operator shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.
- (d) Inspection and testing.
 - (1) Inspections and tests shall be performed on process equipment.
 - (2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.
 - (3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

- (4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.
- (e) Equipment deficiencies. The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in Section 2760.1) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.
- (f) Quality assurance.
 - (1) In the construction of new plants and equipment, the owner or operator shall assure that equipment as it is fabricated is suitable for the process application for which they will be used.
 - (2) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.
 - (3) The owner or operator shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.73, Part 68, Code of Federal Regulations.

Section 2760.6 Management of Change.

- (a) The owner or operator shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process.
- (b) The procedures shall assure that the following considerations are addressed prior to any change:
 - (1) The technical basis for the proposed change;
 - (2) Impact of change on safety and health;
 - (3) Modifications to operating procedures;
 - (4) Necessary time period for the change; and
 - (5) Authorization requirements for the proposed change.

- (c) Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.
- (d) If a change covered by this section results in a change in the process safety information required by Section 2760.1, such information shall be updated accordingly.
- (e) If a change covered by this section results in a change in the operating procedures or practices required by Section 2760.3, such procedures or practices shall be updated accordingly.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.75, Part 68, Code of Federal Regulations.

Section 2760.7 Pre-Startup Review.

- (a) The owner or operator shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.
- (b) The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a process:
 - (1) Construction and equipment is in accordance with design specifications;
 - (2) Safety, operating, maintenance, and emergency procedures are in place and are adequate;
 - (3) For new stationary sources, a PHA has been performed and recommendations have been resolved or implemented before startup, and modified stationary sources meet the requirements contained in management of change, Section 2760.6; and
 - (4) Training of each employee involved in operating a process has been completed.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.77, Part 68, Code of Federal Regulations.

Section 2760.8 Compliance Audits.

- (a) The owner or operator shall certify that they have evaluated compliance with the provisions of this section at least every three years to verify that the procedures and practices developed under the standard are adequate and are being followed.
- (b) The compliance audit shall be conducted by at least one person knowledgeable in the process.
- (c) A report of the findings of the audit shall be developed.

- (d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.
- (e) The owner or operator shall retain the two most recent compliance audit reports.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.79, Part 68, Code of Federal Regulations.

Section 2760.9 Incident Investigation.

- (a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.
- (b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.
- (c) An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.
- (d) A report shall be prepared at the conclusion of the investigation which includes at a minimum:
 - (1) Date of incident;
 - (2) Date investigation began;
 - (3) A description of the incident;
 - (4) The factors that contributed to the incident; and,
 - (5) Recommendations resulting from the investigation.
- (e) The owner or operator shall establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented.
- (f) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.
- (g) Incident investigation reports shall be retained for five years.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.81, Part 68, Code of Federal Regulations.

Section 2760.10 Employee Participation.

- (a) The owner or operator shall develop a written plan of action regarding the implementation of the employee participation required by this section.
- (b) The owner or operator shall consult with employees and their representatives on the conduct and development of PHA and on the development of the other elements of process safety management in this rule.
- (c) The owner or operator shall provide to employees and their representatives access to PHAs and to all other information required to be developed under this rule.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.83, Part 68, Code of Federal Regulations.

Section 2760.11 Hot Work Permit.

- (a) The owner or operator shall issue a hot work permit for hot work operations conducted on or near a covered process.
- (b) The permit shall document that the fire prevention and protection requirements in Section 5189 of Title 8 of CCR have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.85, Part 68, Code of Federal Regulations.

Section 2760.12 Contractors.

- (a) Application. This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.
- (b) Owner or operator responsibilities.
 - (1) The owner or operator, when selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and programs.
 - (2) The owner or operator shall inform the contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

- (3) The owner or operator shall explain to the contract owner or operator the applicable provisions of Article 7.
 - (4) The owner or operator shall develop and implement safe work practices consistent with Section 2760.3(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.
 - (5) The owner or operator shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in section (c).
- (c) Contract owner or operator responsibilities.
- (1) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his or her job.
 - (2) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his or her job and the process, and the applicable provisions of the emergency action plan.
 - (3) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.
 - (4) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by Section 2760.3(d).
 - (5) The contract owner or operator shall advise the owner or operator of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.87, Part 68, Code of Federal Regulations.

Article 7. Emergency Response

- 2765.1 Applicability.
 2765.2 Emergency Response Program.

Section 2765.1 Applicability.

- (a) Except as provided in section (b), the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of Section 2765.2.

- (b) The owner or operator of stationary source whose employees will not respond to accidental releases of regulated substances need not comply with Section 2765.2 provided that they meet the following:
 - (1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under Section of 11003 of Title 42 of the United States Code (USC);
 - (2) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the owner or operator has coordinated response actions with the local fire department; and
 - (3) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.90, Part 68, Code of Federal Regulations.

Section 2765.2 Emergency Response Program.

- (a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:
 - (1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:
 - (A) Procedures for informing and interfacing with the public and local emergency response agencies about accidental releases, emergency planning, and emergency response;
 - (B) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and
 - (C) Procedures and measures for emergency response after an accidental release of a regulated substance;
 - (2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;
 - (3) Training for all employees in relevant procedures and the Incident Command System; and
 - (4) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.

- (b) A written plan that complies with other federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan") and that, among other matters, includes the elements provided in section (a), shall satisfy the requirements of this section if the owner or operator also complies with section (c).
- (c) The emergency response plan developed under section (a)(1) shall be coordinated with the community emergency response plan developed under Section 11003 of Title 42 of USC. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.
- (d) The owner or operator is not required to meet the business plan requirements if the emergency response plan developed under this section is consistent with the business plan requirements pursuant to Sections 2731 and 2732 of Title 19 of CCR. This does not exempt the owner or operator from requirements which relate to the annual inventory or emergency response planning for hazardous materials which are not regulated substances.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.95, Part 68, Code of Federal Regulations.

Article 8. Regulated Substances for Accidental Release Prevention

- 2770.1 Purpose.
- 2770.2 Threshold Determination.
- 2770.3 Petition Process.
- 2770.4 Exemptions.
- 2770.5 List of Substances.

Section 2770.1 Purpose.

This article lists regulated substances pursuant to Section 2770.5 (Tables 1, 2, or 3), identifies specific threshold quantities, and establishes the requirements for petitioning to add, delete, or change the threshold for regulated substances.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25532(g)(j)(l), 25543.1, and 25543.3 Health and Safety Code; and Section 68.100, Part 68, Code of Federal Regulations.

Section 2770.2 Threshold Determination.

- (a) A threshold quantity of a regulated substance listed in Section 2770.5 is present at a stationary source if the total quantity of the regulated substance contained in a process exceeds the threshold.

(b) For the purpose of determining whether more than a threshold quantity of a regulated substance is present at the stationary source, the following exemptions apply:

- (1) Concentrations of a regulated toxic substance in a mixture. A mixture of less than one percent by weight of a regulated toxic substance need not be considered when determining whether more than a threshold quantity is present at the stationary source. A mixture containing a regulated toxic substance is regulated if the concentration of the toxic substance present in the mixture is one percent or greater by weight. The owner or operator of a stationary source, when determining whether more than a threshold quantity in a mixture is present at the stationary source, need not consider portions of the process which can be demonstrated to have a partial pressure of the regulated substance in the mixture (solution), under the handling or storage conditions, which is less than 10 millimeters of mercury (mm Hg).

Oleum, toluene 2,4-diisocyanate, toluene 2,6-diisocyanate and toluene diisocyanate (unspecified isomer), do not qualify for threshold exemptions regarding portions of the process where these regulated substances are handled at partial pressures below 10 mm Hg. The owner or operator of the stationary source shall document any exempted portions of processes where the partial pressure measurements or estimates are less than 10 mm Hg.

- (2) Concentrations of a regulated flammable substance in a mixture. A mixture of less than one percent by weight of a regulated flammable substance need not be considered when determining whether more than a threshold quantity is present at the stationary source. Except as provided in Sections (b)(2)(A) and (2)(B) of this Section, if the concentration of the substance in the mixture is one percent or greater by weight of the mixture, then, for the purpose of determining whether a threshold quantity is present at the stationary source, the entire weight of the mixture shall be treated as the regulated substance unless the owner or operator can demonstrate that the mixture itself does not have a NFPA flammability hazard rating of 4. The demonstration shall be in accordance with the definition of flammability hazard rating 4 in the NFPA 704, Standard System for the Identification of the Fire Hazards of Material, NFPA, Quincy, MA, 1990. Available from the NFPA, 1 Batterymarch Park, Quincy, MA, 02269-9101. Boiling point and flash point shall be defined and determined in accordance with NFPA 30, Flammable and Combustible Liquids Code 1996.

(A) Gasoline. Regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion engines, need not be considered when determining whether more than a threshold quantity is present at a stationary source.

(B) Naturally occurring hydrocarbon mixtures. Prior to entry into a natural gas processing plant or a petroleum refining process unit, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a stationary source. Naturally occurring hydrocarbon mixtures include any combination of the following:

condensate, crude oil, field gas, and produced water, each as defined in Section 2735.3.

- (3) Articles. Regulated substances contained in articles need not be considered when determining whether more than a threshold quantity is present at the stationary source.
- (4) Uses. Regulated substances, when in use for the following purposes, need not be included in determining whether more than a threshold quantity is present at the stationary source:
 - (A) Use as a structural component of the stationary source;
 - (B) Use of products for routine janitorial maintenance;
 - (C) Use by employees of foods, drugs, cosmetics, or other personal items containing the regulated substance; and
 - (D) Use of regulated substances present in process water or non-contact cooling water as drawn from the environment or municipal sources, or use of regulated substances present in air used either as compressed air or as part of combustion.
- (5) Activities in laboratories. If a regulated substance is manufactured, processed, or used in a laboratory at a stationary source under the supervision of a technically qualified individual as defined in Section 720.3(ee) of Chapter 1 of Title 40 of CFR, the quantity of the substance need not be considered in determining whether a threshold quantity is present. This exemption does not apply to:
 - (A) Specialty chemical production;
 - (B) Manufacture, processing, or use of substances in pilot plant scale operations; and
 - (C) Activities conducted outside the laboratory.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25532(j)(l) and 25543.3, Health and Safety Code; and Section 68.115, Part 68, Code of Federal Regulations.

Section 2770.3 Petition Process.

(Note: OES will propose and adopt a process for petitioning the removal or addition of substances on the regulated substance list by June 30, 1998 as required by SB 1889.)

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25543.1, Health and Safety Code; and Section 68.120, Part 68, Code of Federal Regulations.

Section 2770.4 Exemptions.

Agricultural nutrients. Ammonia used as an agricultural nutrient, when held by farmers, is exempt from all provisions of this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.125, Part 68, Code of Federal Regulations.

Section 2770.5 List of Substances.

Regulated toxic and flammable substances under Section 112(r) of the federal CAA are the substances listed in Tables 1 and 2. Table 3 lists those regulated substances pursuant to of HSC (Section 25532 et seq.). Threshold quantities for listed toxic and flammable substances are specified in the tables.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25532(g)(j)(l) and 25543.3, Health and Safety Code; and Section 68.130, Part 68, Code of Federal Regulations.

**Table 1. Federal Regulated Substances and Threshold Quantities
for Accidental Release Prevention**

Chemical Name	CAS Number	Threshold quantity (lbs)	Basis for listing
Acrolein (2-Propenal)	107-02-8	5,000	b
Acrylonitrile (2-Propenenitrile)	107-13-1	20,000	b
Acrylyl chloride (2-Propenoyl chloride)	814-68-6	5,000	b
Allyl alcohol (2-Propen-1-ol)	107-18-61	15,000	b
Allylamine (2-Propen-1-amine)	107-11-9	10,000	b
Ammonia (anhydrous)	7664-41-7	10,000	a,b
Ammonia (conc 20% or greater)	7664-41-7	20,000	a,b
Arsenous trichloride	7784-34-1	15,000	b
Arsine	7784-42-1	1,000	b
Boron trichloride (Borane, trichloro-)	10294-34-5	5,000	b
Boron trifluoride (Borane, trifluoro-)	7637-07-2	5,000	b
Boron trifluoride compound with methyl ether (1:1) (Boron, trifluoro(oxybis(methane)))-, T-4-	353-42-4	15,000	b
Bromine	7726-95-6	10,000	a,b
Carbon disulfide	75-15-0	20,000	b
Chlorine	7782-50-5	2,500	a,b
Chlorine dioxide (Chlorine oxide (ClO ₂))	10049-04-4	1,000	c
Chloroform (Methane, trichloro-)	67-66-3	20,000	b
Chloromethyl ether (Methane, oxybis(chloro-))	542-88-1	1,000	b
Chloromethyl methyl ether (Methane, chloromethoxy-)	107-30-2	5,000	b
Crotonaldehyde (2-Butenal)	4170-30-3	20,000	b
Crotonaldehyde, (E)- (2-Butenal, (E)-)	123-73-9	20,000	b
Cyanogen chloride	506-77-4	10,000	c
Cyclohexylamine (Cyclohexanamine)	108-91-8	15,000	b
Diborane	19287-45-7	2,500	b
Dimethyldichlorosilane (Silane, dichlorodimethyl-)	75-78-5	5,000	b
1,1-Dimethylhydrazine (Hydrazine,1,1-dimethyl-)	57-14-7	15,000	b
Epichlorohydrin (Oxirane, (chloromethyl)-)	106-89-8	20,000	b
Ethylenediamine (1,2-Ethanediamine)	107-15-3	20,000	b
Ethyleneimine (Aziridine)	151-56-4	10,000	b
Ethylene oxide (Oxirane)	75-21-8	10,000	a,b
Fluorine	7782-41-4	1,000	b
Formaldehyde (solution)	50-00-0	15,000	b
Furan	110-00-9	5,000	b
Hydrazine	302-01-2	15,000	b
Hydrochloric acid (conc 30% or greater)	7647-01-0	15,000	d
Hydrocyanic acid	74-90-8	2,500	a,b
Hydrogen chloride (anhydrous) (Hydrochloric acid)	7647-01-0	5,000	a
Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) (Hydrofluoric acid)	7664-39-3	1,000	a,b
Hydrogen selenide	7783-07-5	500	b
Hydrogen sulfide	7783-06-4	10,000	a,b
Iron, pentacarbonyl- (Iron carbonyl (Fe(CO) ₅), (TB-5-11)-)	13463-40-6	2,500	b
Isobutyronitrile (Propanenitrile, 2-methyl-)	78-82-0	20,000	b
Isopropyl chloroformate (Carbonochloridic acid, 1-methylethyl ester)	108-23-6	15,000	b
Methacrylonitrile (2-Propenenitrile, 2-methyl-)	126-98-7	10,000	b
Methyl chloride (Methane, chloro-)	74-87-3	10,000	a

**Table 1. Federal Regulated Substances and Threshold Quantities
for Accidental Release Prevention
(Continued)**

Chemical Name	CAS Number	Threshold quantity (lbs)	Basis for listing
Methyl chloroformate (Carbonochloridic acid, methylester)	79-22-1	5,000	b
Methyl hydrazine (Hydrazine, methyl-)	60-34-4	15,000	b
Methyl isocyanate (Methane, isocyanato-)	624-83-9	10,000	a,b
Methyl mercaptan (Methanethiol)	74-93-1	10,000	b
Methyl thiocyanate (Thiocyanic acid, methyl ester)	556-64-9	20,000	b
Methyltrichlorosilane (Silane, trichloromethyl-)	75-79-6	5,000	b
Nickel carbonyl	13463-39-3	1,000	b
Nitric acid (conc 80% or greater)	7697-37-2	15,000	b
Nitric oxide (Nitrogen oxide (NO))	10102-43-9	10,000	b
Oleum (Fuming Sulfuric acid) (Sulfuric acid, mixture with sulfur trioxide) [FN1] .	8014-95-7	10,000	e
Peracetic acid (Ethaneperoxoic acid)	79-21-0	10,000	b
Perchloromethylmercaptan (Methanesulfenyl chloride, trichloro-)	594-42-3	10,000	b
Phosgene (Carbonic dichloride)	75-44-5	500	a,b
Phosphine	7803-51-2	5,000	b
Phosphorus oxychloride (Phosphoryl chloride)	10025-87-3	5,000	b
Phosphorus trichloride (Phosphorous trichloride)	7719-12-2	15,000	b
Piperidine	110-89-4	15,000	b
Propionitrile (Propanenitrile)	107-12-0	10,000	b
Propyl chloroformate (Carbonochloridic acid, propylester)	109-61-5	15,000	b
Propyleneimine (Aziridine, 2-methyl-)	75-55-8	10,000	b
Propylene oxide (Oxirane, methyl-)	75-56-9	10,000	b
Sulfur dioxide (anhydrous)	7446-09-5	5,000	a,b
Sulfur tetrafluoride (Sulfur fluoride (SF4), (T-4)-)	7783-60-0	2,500	b
Sulfur trioxide	7446-11-9	10,000	a,b
Tetramethyllead (Plumbane, tetramethyl-)	75-74-1	10,000	b
Tetranitromethane (Methane, tetranitro-)	509-14-8	10,000	b
Titanium tetrachloride (Titanium chloride (TiCl4) (T-4)-)	7550-45-0	2,500	b
Toluene 2,4-diisocyanate (Benzene, 2,4-diisocyanato-1-methyl-) [FN1]	584-84-9	10,000	a
Toluene 2,6-diisocyanate (Benzene, 1,3-diisocyanato-2-methyl-) [FN1]	91-08-7	10,000	a
Toluene diisocyanate (unspecified isomer) (Benzene, 1,3-diisocyanatomethyl-) [FN1]	26471-62-5	10,000	a
Trimethylchlorosilane (Silane, chlorotrimethyl-)	75-77-4	10,000	b
Vinyl acetate monomer (Acetic acid ethenyl ester)	108-05-4	15,000	b

FN1 The mixture exemption in Section 2770.2(b)(1) does not apply to the Substance.

FN Note - Basis for Listing:

Fna Mandated for listing by Congress.

Fnb On EHS list, vapor pressure 10 mmHg or greater.

Fnc Toxic gas.

Fnd Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents.

Fne Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents.

**Table 2. Federal Regulated Flammable Substances List and Threshold Quantities
for Accidental Release Prevention**

Chemical Name	CAS Numbers	Threshold quantity (lbs)	Basis for listing
Acetaldehyde	75-07-0	10,000	g
Acetylene (Ethyne)	74-86-2	10,000	f
Bromotrifluoroethylene (Ethene, bromotrifluoro-)	598-73-2	10,000	f
1,3-Butadiene	106-99-0	10,000	f
Butane	106-97-8	10,000	f
1-Butene	106-98-9	10,000	f
2-Butene	107-01-7	10,000	f
Butene	25167-67-3	10,000	f
2-Butene-cis	590-18-1	10,000	f
2-Butene-trans (2-Butene, (E))	624-64-6	10,000	f
Carbon oxysulfide (Carbon oxide sulfide (COS))	463-58-1	10,000	f
Chlorine monoxide (Chlorine oxide)	7791-21-1	10,000	f
2-Chloropropylene (1-Propene, 2-chloro-)	557-98-2	10,000	g
1-Chloropropylene (1-Propene, 1-chloro-)	590-21-6	10,000	g
Cyanogen (Ethanedinitrile)	460-19-5	10,000	f
Cyclopropane	75-19-4	10,000	f
Dichlorosilane (Silane, dichloro-)	4109-96-0	10,000	f
Difluoroethane (Ethane, 1,1-difluoro-)	75-37-6	10,000	f
Dimethylamine (Methanamine, N-methyl-)	124-40-3	10,000	f
2,2-Dimethylpropane (Propane, 2,2-dimethyl-)	463-82-1	10,000	f
Ethane	74-84-0	10,000	f
Ethyl acetylene (1-Butyne)	107-00-6	10,000	f
Ethylamine (Ethanamine)	75-04-7	10,000	f
Ethyl chloride (Ethane, chloro-)	75-00-3	10,000	f
Ethylene (Ethene)	74-85-1	10,000	f
Ethyl ether (Ethane, 1,1'-oxybis-)	60-29-7	10,000	g
Ethyl mercaptan (Ethanethiol)	75-08-1	10,000	g
Ethyl nitrite (Nitrous acid, ethyl ester)	109-95-5	10,000	f
Hydrogen	1333-74-0	10,000	f
Isobutane (Propane, 2-methyl)	75-28-5	10,000	f
Isopentane (Butane, 2-methyl-)	78-78-4	10,000	g
Isoprene (1,3-Butadiene, 2-methyl-)	78-79-5	10,000	g
Isopropylamine (2-Propanamine)	75-31-0	10,000	g
Isopropyl chloride (Propane, 2-chloro-)	75-29-6	10,000	g
Methane	74-82-8	10,000	f
Methylamine (Methanamine)	74-89-5	10,000	f
3-Methyl-1-butene	563-45-1	10,000	f
2-Methyl-1-butene	563-46-2	10,000	g
Methyl ether (Methane, oxybis-)	115-10-6	10,000	f
Methyl formate (Formic acid, methyl ester)	107-31-3	10,000	g
2-Methylpropene (1-Propene, 2-methyl-)	115-11-7	10,000	f
1,3-Pentadiene	504-60-9	10,000	f
Pentane	109-66-0	10,000	g
1-Pentene	109-67-1	10,000	g
2-Pentene, (E)-	646-04-8	10,000	g
2-Pentene, (Z)-	627-20-3	10,000	g

**Table 2. Federal Regulated Flammable Substances List and Threshold Quantities
for Accidental Release Prevention**
(Continued)

Chemical Name	CAS Numbers	Threshold quantity (lbs)	Basis for listing
Propadiene (1,2-Propadiene)	463-49-0	10,000	f
Propane	74-98-6	10,000	f
Propylene (1-Propene)	115-07-1	10,000	f
Propyne (1-Propyne)	74-99-7	10,000	f
Silane	7803-62-5	10,000	f
Tetrafluoroethylene (Ethene, tetrafluoro-)	116-14-3	10,000	f
Tetramethylsilane (Silane, tetramethyl-)	75-76-3	10,000	g
Trichlorosilane (Silane, trichloro-)	10025-78-2	10,000	g
Trifluorochloroethylene (Ethene, chlorotrifluoro-)	79-38-9	10,000	f
Trimethylamine (Methanamine, N,N-dimethyl-)	75-50-3	10,000	f
Vinyl acetylene (1-Buten-3-yne)	689-97-4	10,000	f
Vinyl chloride (Ethene, chloro-)	75-01-4	10,000	a,f
Vinyl ethyl ether (Ethene, ethoxy-)	109-92-2	10,000	g
Vinyl fluoride (Ethene, fluoro-)	75-02-5	10,000	f
Vinylidene chloride (Ethene, 1,1-dichloro-)	75-35-4	10,000	g
Vinylidene fluoride (Ethene, 1,1-difluoro-)	75-38-7	10,000	f
Vinyl methyl ether (Ethene, methoxy-)	107-25-5	10,000	f

FN Note - Basis for Listing:

Fna Mandated for listing by Congress.

Fnf Flammable gas.

Fng Volatile flammable liquid.

**Table 3. State Regulated Substances List and Threshold Quantities
for Accidental Release Prevention**

Chemical Name	CAS Number	State Threshold Quantity (lbs)
• Acetone Cyanohydrin	75-86-5	1,000
Acetone Thiosemicarbazide	1752-30-3	1,000/10,000 ¹
Acrolein [2-Propenal]	107-02-8	500
Acrylamide	79-06-1	1,000/10,000 ¹
Acrylonitrile [2- Propenenitrile]	107-13-1	10,000
Acrylyl Chloride [2-Propenoyl Chloride]	814-68-6	100
Aldicarb	116-06-3	100/10,000 ¹
Aldrin	309-00-2	500/10,000 ¹
Allyl Alcohol [2-Propen-1-ol]	107-18-6	1,000
Allylamine [2-Propen-1-amine]	107-11-9	500
Aluminum Phosphide	20859-73-8	500
Aminopterin	54-62-6	500/10,000 ¹
Amiton Oxalate	3734-97-2	100/10,000 ¹
Ammonia ²	7664-41-7	500
• Aniline	62-53-3	1,000
Antimycin A	1397-94-0	1,000/10,000 ¹
ANTU [1-Naphthalenylthiourea]	86-88-4	500/10,000 ¹
Arsenic Pentoxide	1303-28-2	100/10,000 ¹
Arsenous Oxide [Arsenic Trioxide]	1327-53-3	100/10,000 ¹
Arsenous Trichloride	7784-34-1	500
Arsine [Arsenic Hydride]	7784-42-1	100
Azinphos-Ethyl	2642-71-9	100/10,000 ¹
Azinphos-Methyl [Guthion]	86-50-0	10/10,000 ¹
Benzene, 1-(Chloromethyl)-4-Nitro-	100-14-1	500/10,000 ¹
Benzeneearsonic Acid	98-05-5	10/10,000 ¹
Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	3615-21-2	500/10,000 ¹
• Benzotrichloride [Benzoic trichloride]	98-07-7	100
Bicyclo[2.2.1] Heptane-2-Carbonitrile, 5-Chloro- 6-(((Methylamino)Carbonyl)Oxy)Imino)-, (1s-(1-alpha, 2-beta, 4-alpha, 5-alpha, 6E))-	15271-41-7	500/10,000 ¹
Bis(Chloromethyl) Ketone	534-07-6	10/10,000 ¹
Bitoscanate	4044-65-9	500/10,000 ¹
Boron Trichloride [Trichloroborane]	10294-34-5	500
Boron Trifluoride [Trifluoroborane]	7637-07-2	500
Boron Trifluoride Compound w/ Methyl Ether (1:1)	353-42-4	1,000
Bromadiolone	28772-56-7	100/10,000 ¹
Bromine	7726-95-6	500
Cadmium Oxide	1306-19-0	100/10,000 ¹
Cadmium Stearate	2223-93-0	1,000/10,000 ¹
Calcium Arsenate	7778-44-1	500/10,000 ¹
Camphechlor	8001-35-2	500/10,000 ¹
Cantharidin	56-25-7	100/10,000 ¹
Carbachol Chloride	51-83-2	500/10,000 ¹
Carbamic Acid, Methyl-,o-(((2,4-Dimethyl-1, 3-Dithiolan-2-YL)Methylene)Amino)-	26419-73-8	100/10,000 ¹
Carbofuran	1563-66-2	10/10,000 ¹
Carbon Disulfide	75-15-0	10,000
Chlorine	7782-50-5	100

**Table 3. State Regulated Substances List and Threshold Quantities
for Accidental Release Prevention
(Continued)**

Chemical Name	CAS Number	State Threshold Quantity (lbs)
Chlormequat Chloride	999-81-5	100/10,000 ¹
Chloroacetic Acid	79-11-8	100/10,000 ¹
Chloroform	67-66-3	10,000
Chloromethyl Ether	542-88-1	100
Chloromethyl Methyl Ether [Chloromethoxymethane]	107-30-2	100
Chlorophacinone	3691-35-8	100/10,000 ¹
Chloroxuron	1982-47-4	500/10,000 ¹
Chromic Chloride	10025-73-7	1/10,000 ¹
Cobalt Carbonyl	10210-68-1	10/10,000 ¹
Cobalt, ((2,2'-(1,2-Ethanediy)lbis(Nitrilomethylidene)) Bis(6-Fluorophenolato))(2-)-N,N',O,O')-	62207-76-5	100/10,000 ¹
Colchicine	64-86-8	10/10,000 ¹
Coumaphos	56-72-4	100/10,000 ¹
Coumatetralyl	5836-29-3	500/10,000 ¹
Cresol, o-	95-48-7	1,000/10,000 ¹
Crimidine	535-89-7	100/10,000 ¹
Crotonaldehyde [2-Butenal]	4170-30-3	1,000
(E)-Crotonaldehyde [(E)-2-Butenal]	123-73-9	1,000
Cyanogen Bromide	506-68-3	500/10,000 ¹
Cyanogen Iodide	506-78-5	1,000/10,000 ¹
Cyanuric Fluoride	675-14-9	100
Cycloheximide	66-81-9	100/10,000 ¹
Cyclohexylamine [Cyclohexanamine]	108-91-8	10,000
Decaborane(14)	17702-41-9	500/10,000 ¹
Dialifor	10311-84-9	100/10,000 ¹
Diborane	19287-45-7	100
• Diepoxybutane	1464-53-5	500
Digitoxin	71-63-6	100/10,000 ¹
Digoxin	20830-75-5	10/10,000 ¹
Dimethoate	60-51-5	500/10,000 ¹
Dimethyldichlorosilane	75-78-5	500
1,1-Dimethylhydrazine [Dimethylhydrazine]	57-14-7	1,000
Dimethyl-p-Phenylenediamine	99-98-9	10/10,000 ¹
• Dimethyl Sulfate	77-78-1	500
Dimetilan	644-64-4	500/10,000 ¹
Dinitrocresol [4,6-Dinitro-o-Cresol]	534-52-1	10/10,000 ¹
Dinoseb	88-85-7	100/10,000 ¹
Dinoterb	1420-07-1	500/10,000 ¹
Diphacinone	82-66-6	10/10,000 ¹
• Disulfoton	298-04-4	500
Dithiazanine Iodide	514-73-8	500/10,000 ¹
Dithiobiuret	541-53-7	100/10,000 ¹
Emetine, Dihydrochloride	316-42-7	1/10,000 ¹
Endosulfan	115-29-7	10/10,000 ¹
Endothion	2778-04-3	500/10,000 ¹
Endrin	72-20-8	500/10,000 ¹
Epichlorohydrin [(Chloromethyl)Oxirane]	106-89-8	1,000

**Table 3. State Regulated Substances List and Threshold Quantities
for Accidental Release Prevention
(Continued)**

Chemical Name	CAS Number	State Threshold Quantity (lbs)
EPN [Phenylphosphonothioic Acid o-Ethyl o-(4-Nitrophenyl) Ester]	2104-64-5	100/10,000 ¹
Ergocalciferol	50-14-6	1,000/10,000 ¹
Ergotamine Tartrate	379-79-3	500/10,000 ¹
Ethylenediamine [1,2-Ethanediamine]	107-15-3	10,000
Ethylene Fluorohydrin	371-62-0	10
Ethyleneimine [Aziridine]	151-56-4	500
Ethylene Oxide [Oxirane]	75-21-8	1,000
Fenamiphos	22224-92-6	10/10,000 ¹
Fluenetil	4301-50-2	100/10,000 ¹
Fluorine	7782-41-4	500
Fluoroacetamide	640-19-7	100/10,000 ¹
Fluoroacetic Acid	144-49-0	10/10,000 ¹
Fluoroacetyl Chloride	359-06-8	10
Fluorouracil	51-21-8	500/10,000 ¹
Formaldehyde ²	50-00-0	500
Formetanate Hydrochloride	23422-53-9	500/10,000 ¹
Formparanate	17702-57-7	100/10,000 ¹
Fuberidazole	3878-19-1	100/10,000 ¹
Furan	110-00-9	500
Gallium Trichloride	13450-90-3	500/10,000 ¹
Hydrazine	302-01-2	1,000
Hydrogen Chloride [Anhydrous Hydrochloric Acid], (Gas)	7647-01-0	500
Hydrogen Cyanide [Hydrocyanic Acid], (Gas)	74-90-8	100
Hydrogen Fluoride [Anhydrous Hydrofluoric Acid], (Gas)	7664-39-3	100
Hydrogen Selenide	7783-07-5	10
Hydrogen Sulfide	7783-06-4	500
• Hydroquinone ⁴	123-31-9	500/10,000 ¹
Iron, Pentacarbonyl-	13463-40-6	100
Isobenzan	297-78-9	100/10,000 ¹
Isobutyronitrile [2-Methylpropanenitrile]	78-82-0	1,000
Isocyanic Acid, 3,4-Dichlorophenyl Ester	102-36-3	500/10,000 ¹
Isodrin	465-73-6	100/10,000 ¹
Isophorone Diisocyanate	4098-71-9	100
Isopropyl Chloroformate [Carbonochloridic acid, 1-methylethyl ester]	108-23-6	1,000
Leptophos	21609-90-5	500/10,000 ¹
• Lewisite [Chlorovinylarsine Dichloride]	541-25-3	10
Lindane [Hexachlorocyclohexane (Gamma Isomer)]	58-89-9	1,000/10,000 ¹
Lithium Hydride	7580-67-8	100
Malononitrile	109-77-3	500/10,000 ¹
• Manganese, Tricarbonyl Methylcyclopentadienyl	12108-13-3	100
Mercuric Acetate	1600-27-7	500/10,000 ¹
Mercuric Chloride	7487-94-7	500/10,000 ¹
Mercuric Oxide	21908-53-2	500/10,000 ¹
Methacrylonitrile [Methyl acrylonitrile] [2-Methyl-2-propenenitrile]	126-98-7	500
Methacryloyl Chloride	920-46-7	100
Methacryloyloxyethyl Isocyanate	30674-80-7	100

**Table 3. State Regulated Substances List and Threshold Quantities
for Accidental Release Prevention
(Continued)**

Chemical Name	CAS Number	State Threshold Quantity (lbs)
Methamidophos	10265-92-6	100/10,000 ¹
Methanesulfonyl Fluoride	558-25-8	1,000
Methidathion	950-37-8	500/10,000 ¹
Methiocarb [Mercaptodimethur]	2032-65-7	500/10,000 ¹
Methomyl	16752-77-5	500/10,000 ¹
Methoxyethylmercuric Acetate	151-38-2	500/10,000 ¹
Methyl Bromide [Bromomethane]	74-83-9	1,000
Methyl 2-Chloroacrylate	80-63-7	500
Methyl Chloroformate [Carbonochloridic Acid, Methyl Ester]	79-22-1	500
Methyl Hydrazine	60-34-4	500
Methyl Isocyanate [Isocyanatomethane]	624-83-9	500
Methyl Isothiocyanate	556-61-6	500
Methyl Mercaptan [Methanethiol] [Thiomethanol]	74-93-1	500
Methylmercuric Dicyanamide	502-39-6	500/10,000 ¹
Methyl Parathion [Parathion Methyl]	298-00-0	100/10,000 ¹
Methyl Phosphonic Dichloride	676-97-1	100
Methyl Thiocyanate	556-64-9	10,000
Methyltrichlorosilane [Trichloromethylsilane]	75-79-6	500
Methyl Vinyl Ketone	78-94-4	10
Metolcarb	1129-41-5	100/10,000 ¹
Mexacarbate	315-18-4	500/10,000 ¹
Mitomycin C	50-07-7	500/10,000 ¹
Monocrotophos	6923-22-4	10/10,000 ¹
Muscimol [5-(Aminomethyl)-3-Isloxazolol]	2763-96-4	500/10,000 ¹
• Mustard Gas [2,2'- Dichloroethyl Sulfide]	505-60-2	500
Nickel Carbonyl [Nickel Tetracarbonyl]	13463-39-3	1
Nicotine Sulfate	65-30-5	100/10,000 ¹
Nitric Acid	7697-37-2	1,000
Nitric Oxide [Nitrogen Monoxide (NO)]	10102-43-9	100
• Nitrobenzene	98-95-3	10,000
Nitrogen Dioxide	10102-44-0	100
• Nitrogen Mustard [Mechlorethamine]	51-75-2	10
Norbormide	991-42-4	100/10,000 ¹
Organorhodium Complex (PMN-82-147)	MIXTURE	10/10,000 ¹
Ouabain	630-60-4	100/10,000 ¹
Oxamyl	23135-22-0	100/10,000 ¹
Ozone	10028-15-6	100
Paraquat [Paraquat Dichloride]	1910-42-5	10/10,000 ¹
Paraquat Methosulfate	2074-50-2	10/10,000 ¹
Paris Green [Cupric Acetoarsenite]	12002-03-8	500/10,000 ¹
Pentaborane	19624-22-7	500
Pentadecylamine	2570-26-5	100/10,000 ¹
Peracetic Acid [Ethaneperoxoic Acid] [Peroxyacetic Acid]	79-21-0	500
Perchloromethylmercaptan [Trichloromethanesulfonyl Chloride]	594-42-3	500

**Table 3. State Regulated Substances List and Threshold Quantities
for Accidental Release Prevention
(Continued)**

Chemical Name	CAS Number	State Threshold Quantity (lbs)
Phenol	108-95-2	500/10,000 ¹
Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)	4418-66-0	100/10,000 ¹
Phenol, 3-(1-Methylethyl)-, Methylcarbamate	64-00-6	500/10,000 ¹
Phenoxarsine, 10, 10' - oxydi-	58-36-6	500/10,000 ¹
• Phenyldichloroarsine [Dichlorophenylarsine] [Lewisite Variant]	696-28-6	500
Phenylhydrazine Hydrochloride	59-88-1	1,000/10,000 ¹
Phenylmercury Acetate [Phenylmercuric Acetate]	62-38-4	500/10,000 ¹
Phenylsilatrane	2097-19-0	100/10,000 ¹
Phenylthiourea	103-85-5	100/10,000 ¹
• Phorate	298-02-2	10
Phosacetim	4104-14-7	100/10,000 ¹
Phosfolan	947-02-4	100/10,000 ¹
Phosgene [Carbonyl Chloride] [Carbonic Dichloride]	75-44-5	10
Phosmet	732-11-6	10/10,000 ¹
Phosphine [Hydrogen Phosphide]	7803-51-2	500
• Phosphonothioic Acid, Methyl-, S-(2-(Bis (1-Methylethyl)Amino)Ethyl) O-Ethyl Ester	50782-69-9	100
Phosphorus	7723-14-0	100
Phosphorus Oxychloride [Phosphoryl Chloride]	10025-87-3	500
Phosphorus Pentachloride	10026-13-8	500
Phosphorus Trichloride	7719-12-2	1,000
Physostigmine	57-47-6	100/10,000 ¹
Physostigmine, Salicylate (1:1)	57-64-7	100/10,000 ¹
Picrotoxin	124-87-8	500/10,000 ¹
Piperidine	110-89-4	1,000
Potassium Arsenite	10124-50-2	500/10,000 ¹
Potassium Cyanide	151-50-8	100
Potassium Silver Cyanide	506-61-6	500
Promecarb	2631-37-0	500/10,000 ¹
Propargyl Bromide [3-Bromopropyne]	106-96-7	10
• beta-Propiolactone	57-57-8	500
Propionitrile [Propanenitrile] [Ethyl Cyanide]	107-12-0	500
Propiophenone, 4'-Amino-	70-69-9	100/10,000 ¹
Propyl Chloroformate [Carbonochloridic Acid, Propylester]	109-61-5	500
Propylene Oxide [Methyloxirane]	75-56-9	10,000
Propyleneimine [2-Methylaziridine]	75-55-8	10,000
Prothoate	2275-18-5	100/10,000 ¹
Pyrene	129-00-0	1,000/10,000 ¹
Pyridine, 4-Amino-	504-24-5	500/10,000 ¹
Pyridine, 4-Nitro-, 1-Oxide	1124-33-0	500/10,000 ¹
Pyriminil	53558-25-1	100/10,000 ¹
Salcomine	14167-18-1	500/10,000 ¹
• Sarin	107-44-8	10
Selenious Acid	7783-00-8	1,000/10,000 ¹
Semicarbazide Hydrochloride	563-41-7	1,000/10,000 ¹
Sodium Arsenate	7631-89-2	1,000/10,000 ¹
Sodium Arsenite	7784-46-5	500/10,000 ¹

**Table 3. State Regulated Substances List and Threshold Quantities
for Accidental Release Prevention
(Continued)**

Chemical Name	CAS Number	State Threshold Quantity (lbs)
Sodium Azide (Na (N ₃))	26628-22-8	500
Sodium Cacodylate	124-65-2	100/10,000 ¹
Sodium Cyanide (Na (CN))	143-33-9	100
Sodium Fluoroacetate [Fluoroacetic acid, sodium salt]	62-74-8	10/10,000 ¹
Sodium Selenate	13410-01-0	100/10,000 ¹
Sodium Selenite	10102-18-8	100/10,000 ¹
Sodium Tellurite	10102-20-2	500/10,000 ¹
Stannane, Acetoxytriphenyl-	900-95-8	500/10,000 ¹
Strychnine	57-24-9	100/10,000 ¹
Strychnine, Sulfate	60-41-3	100/10,000 ¹
Sulfur Dioxide	7446-09-5	500
• Sulfuric Acid ³	7664-93-9	1,000
Sulfur Tetrafluoride	7783-60-0	100
Sulfur Trioxide [Sulfuric anhydride]	7446-11-9	100
• Tabun [Ethyl dimethylamidocyanophosphate]	77-81-6	10
Tellurium Hexafluoride	7783-80-4	100
Tetramethyllead [Tetramethylplumbane]	75-74-1	100
Tetranitromethane	509-14-8	500
Thallium Sulfate	10031-59-1	100/10,000 ¹
Thallos Carbonate [Thallium (I) carbonate]	6533-73-9	100/10,000 ¹
Thallos Chloride [Thallium chloride]	7791-12-0	100/10,000 ¹
Thallos Malonate [Thallium Malonate]	2757-18-8	100/10,000 ¹
Thallos Sulfate [Thallium (I) sulfate]	7446-18-6	100/10,000 ¹
Thiocarbazine	2231-57-4	1,000/10,000 ¹
Thiofanox	39196-18-4	100/10,000 ¹
Thiosemicarbazide	79-19-6	100/10,000 ¹
Thiourea, (2-Chlorophenyl)-	5344-82-1	100/10,000 ¹
Thiourea, (2-Methylphenyl)-	614-78-8	500/10,000 ¹
Titanium Tetrachloride	7550-45-0	100
Toluene-2,4-Diisocyanate [2,4-Diisocyanato-1-methylbenzene]	584-84-9	500
Toluene-2,6-Diisocyanate [1,3-Diisocyanato-2-methylbenzene]	91-08-7	100
Triamiphos	1031-47-6	500/10,000 ¹
Trichloro(Chloromethyl)Silane	1558-25-4	100
Trichloro(Dichlorophenyl)Silane	27137-85-5	500
Trichloronate	327-98-0	500
Triethoxysilane	998-30-1	500
Trimethylchlorosilane [Chlorotrimethylsilane]	75-77-4	1,000
Trimethylolpropane Phosphite	824-11-3	100/10,000 ¹
Trimethyltin Chloride	1066-45-1	500/10,000 ¹
Triphenyltin Chloride	639-58-7	500/10,000 ¹
• Tris(2-Chloroethyl)Amine	555-77-1	100
Valinomycin	2001-95-8	1,000/10,000 ¹
Vanadium Pentoxide	1314-62-1	100/10,000 ¹
Vinyl Acetate Monomer [Vinyl acetate] [Acetic acid, ethenyl ester]	108-05-4	1,000
Warfarin	81-81-2	500/10,000 ¹
Warfarin Sodium [Coumadin] (Sodium salt)	129-06-6	100/10,000 ¹

**Table 3. State Regulated Substances List and Threshold Quantities
for Accidental Release Prevention
(Continued)**

Chemical Name	CAS Number	State Threshold Quantity (lbs)
Xylylene Dichloride	28347-13-9	100/10,000 ¹
Zinc, Dichloro(4,4-Dimethyl-5(((Methylamino) Carbonyl)Oxy)Imino)Pentanenitrile)-, (T-4)-	58270-08-9	100/10,000 ¹
Zinc Phosphide	1314-84-7	500

- Substances delisted failing physical criteria test and relisted pursuant to health impacts.

¹ These extremely hazardous substances are solids. The lesser quantity listed applies only if in powdered form and with a particle size of less than 100 microns; or if handled in solution or in molten form; or the substance has an NFPA rating for reactivity of 2, 3, or 4. Otherwise, a 10,000 pound threshold applies.

² Appropriate synonyms or mixtures of extremely hazardous substances with the same CAS number are also regulated, e.g., anhydrous ammonia, formalin.

³ Sulfuric acid is a State Regulated Substance only under the following conditions:

- If concentrated with greater than 100 pounds of sulfur trioxide or the acid meets the definition of oleum. (The threshold for sulfur trioxide is 100 pounds.) (The threshold for oleum is 10,000 pounds.)
- If in a container with flammable hydrocarbons (flash point < 73° F).

⁴ Hydroquinone is exempt in crystalline form.

Article 9. Other Requirements

- 2775.1 Recordkeeping.
- 2775.2 Availability of Information to the Public.
- 2775.3 Permit Content and Air Permitting Authority or OES Requirements.
- 2775.4 Audits.
- 2775.5 Inspections.

Section 2775.1 Recordkeeping.

The owner or operator shall maintain records supporting the implementation of this chapter for five years unless otherwise provided in Section 2760.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.200, Part 68, Code of Federal Regulations.

Section 2775.2 Availability of Information to the Public.

- (a) The RMP required under Article 3 of this chapter shall be available to the public under Section 7414 of Title 42 of USC.
- (b) The disclosure of classified information by the Department of Defense or other federal agencies or contractors of such agencies shall be controlled by applicable laws, regulations, or executive orders concerning the release of classified information.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534.05(a), 25535.2, and 25538, Health and Safety Code; and Section 68.210, Part 68, Code of Federal Regulations.

Section 2775.3 Permit Content and Air Permitting Authority or OES Requirements.

- (a) The requirements of this section apply to any stationary source subject to this chapter and Part 70 or 71 of Title 40 of CFR. The Part 70 or 71 of Title 40 of CFR permit for the stationary source shall contain:
 - (1) A statement listing Part 68 of Title 40 of CFR as an applicable requirement;
 - (2) Conditions that require the source owner or operator to submit:
 - (A) A compliance schedule for meeting the requirements of this chapter by the date provided in Section 2735.4(a), or
 - (B) As part of the compliance certification submitted under Section 70.6(c)(5) of Title 40 of CFR, a certification statement that the source is in compliance with all requirements of this chapter, including the registration and submission of the RMP.

- (b) The owner or operator shall submit any additional relevant information requested by the AA, OES or the appropriate APCD or AQMD.
- (c) For Part 70 or 71 of Title 40 of CFR permits issued prior to the deadline for registering and submitting the RMP and which do not contain permit conditions described in section (a), the owner or operator or the appropriate APCD or AQMD shall initiate permit revision or reopening according to the procedures of Part 70.7 or 71.7 of Title 40 of CFR to incorporate the terms and conditions consistent with section (a).
- (d) The appropriate APCD or AQMD shall, at a minimum:
 - (1) Verify from the AA that the source owner or operator has registered and submitted an RMP or a revised plan when required by this chapter;
 - (2) Verify from the AA that the source owner or operator has submitted a source certification or in its absence has submitted a compliance schedule consistent with section (a)(2);
 - (3) Initiate enforcement action based on sections (d)(1) and (d)(2) as appropriate. The AQMD or APCD shall notify OES of enforcement actions taken pursuant to this chapter.
- (e) The fact that an owner or operator of a stationary source is subject to this chapter due to applicability under Section 2734.4(b) shall not in itself subject the stationary source to the requirements of Part 70 or 71 of Title 40 of CFR.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533(b), 25535(a), and 25540.5, Health and Safety Code; and Section 68.215, Part 68, Code of Federal Regulations.

Section 2775.4 Audits.

- (a) In addition to inspections for the purpose of regulatory development and enforcement of the federal CAA, the AA shall periodically audit RMPs submitted under Article 3 of this chapter to review the adequacy of such RMPs and require revisions of RMPs when necessary to ensure compliance with Article 3 of this chapter.
- (b) The AA shall select stationary sources for audits based on any of the following criteria:
 - (1) Accident history of the stationary source;
 - (2) Accident history of other stationary sources in the same industry;
 - (3) Quantity of regulated substances present at the stationary source;

- (4) Location of the stationary source and its proximity to the public and environmental receptors;
 - (5) The presence of specific regulated substances;
 - (6) The hazards identified in the RMP; and
 - (7) A plan providing for neutral, random oversight.
- (c) Exemption from audits. A stationary source with a Star or Merit ranking under federal OSHA's voluntary protection program shall be exempt from audits under sections (b)(2) and (b)(7).
- (d) In accordance with Section 25534.5 of HSC, the AA shall have access to the stationary source, supporting documentation, and any area where an accidental release could occur.
- (e) Based on the audit, the AA may issue the owner or operator of a stationary source a written preliminary determination of necessary revisions to the stationary source's RMP to ensure that the RMP meets the criteria of Article 3 of this chapter. The preliminary determination shall include an explanation for the basis for the revisions, reflecting industry standards and guidelines (such as AIChE/CCPS guidelines and ASME and API standards) to the extent that such standards and guidelines are applicable, and shall include a timetable for their implementation.
- (f) Written response to a preliminary determination.
- (1) The owner or operator shall respond in writing to a preliminary determination made in accordance with section (e). The response shall state the owner or operator will implement the revisions contained in the preliminary determination in accordance with the timetable included in the preliminary determination or shall state that the owner or operator rejects the revisions in whole or in part. For each rejected revision, the owner or operator shall explain the basis for rejecting such revision. Such explanation may include substitute revisions.
 - (2) The written response under section (f)(1) shall be received by the AA within 90 days of the issue of the preliminary determination or a shorter period of time as the AA specifies in the preliminary determination as necessary to protect public health and the environment. Prior to the written response being due and upon written request from the owner or operator, the AA may provide in writing additional time for the response to be received.
- (g) After providing the owner or operator an opportunity to respond under section (f), the AA may issue the owner or operator a written final determination of necessary revisions to the stationary source's RMP. The final determination may adopt or modify the revisions contained in the preliminary determination under section (e) or may adopt or modify the substitute revisions provided in the response under section (f). A final determination that adopts a revision rejected by the owner or operator shall include an explanation of the basis

for the revision. A final determination that fails to adopt a substitute revision provided under section (f) shall include an explanation of the basis for finding such substitute revision unreasonable.

- (h) Thirty days after completion of the actions detailed in the implementation schedule set in the final determination under section (g), the owner or operator shall be in violation of Article 3 of this chapter and this section unless the owner or operator revises the RMP prepared under Article 3 of this chapter as required by the final determination, and submits the revised RMP as required under Section 2745.1.
- (i) The public shall have access to the preliminary determinations, responses, and final determinations under this section in a manner consistent with Section 2775.2.
- (j) Nothing in this section shall preclude, limit, or interfere in any way with the authority of USEPA or the state to exercise its enforcement, investigatory, and information gathering authorities under the federal CAA or the HSC.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534.05, 25534.5, and 25537, Health and Safety Code; and Section 68.220, Part 68, Code of Federal Regulations.

Section 2775.5 Inspections

The AA shall inspect every stationary source required to be registered pursuant to this chapter at least once every three years to determine whether the stationary source is in compliance with this chapter. The requirements of this section do not alter or affect the immunity provided a public entity pursuant to Section 818.6 of the Government Code.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25534.5, 25537, 25540.5, and 25541.3, Health and Safety Code.

Article 10. Dispute Resolution

- 2780.1 Local Implementation Standards.
- 2780.2 Administering Agency Performance Standards.
- 2780.3 Maintaining of Administering Agency Authorization and Reporting.
- 2780.4 Coordination with the Unified Program.
- 2780.5 Performance Audit Submission.
- 2780.6 Administering Agency Performance Evaluation.
- 2780.7 OES Authority

Section 2780.1 Local Implementation Standards.

- (a) Disputes arising between the owner or operator of a stationary source and an AA under this chapter shall first be decided by the AA pursuant to a dispute resolution process. Each AA

shall establish procedures necessary to implement this dispute resolution process. These procedures shall:

- (1) Provide that the owner or operator of a stationary source may initiate the dispute resolution process by serving the AA with prompt, written notice of a dispute;
 - (2) Identify the official(s) or other employee(s) of the AA who will resolve disputes arising under this Section;
 - (3) Set procedures and timetables for providing argument and supporting materials to the AA;
 - (4) Require that the AA render its decision within 120 days after the owner or operator of a stationary source initiates the dispute resolution process; and
 - (5) Use an existing CUPA dispute resolution process if the AA is also a CUPA, providing it meets the criteria above.
- (b) The owner or operator of a stationary source may appeal the AA's decision to the Director of OES by serving the Director with written notice of appeal. The notice of appeal shall be accompanied by:
- (1) A copy of the decision of the AA,
 - (2) A copy of any written material that the stationary source submitted to the AA during the dispute resolution process that the stationary source wishes the Director to consider, and
 - (3) A concise statement of the grounds upon which the stationary source disputes the decision rendered by the AA. The notice of appeal and accompanying materials shall be served on the Director and the AA by certified mail, return receipt requested. Such service shall be effected no later than 30 days after the AA renders its decision, or, if the AA fails to timely render a decision, no later than 150 days after the stationary source initiated the dispute resolution process with the AA.
- (c) After receipt of the notice of appeal and accompanying materials, the Director shall provide a written acknowledgment of such receipt to the appealing party and the AA. At the time that the Director sends this acknowledgment, or at any later time, the Director, in his or her discretion, may request further materials, information or briefing from the stationary source or the AA, and the Director may set schedules for the submission of such materials, information or briefing. The Director shall also provide the opportunity for public comment on the dispute, and shall allow the stationary source and the AA the opportunity to respond to any comments submitted by the public.
- (d) Within 120 days after the service of the notice of appeal, or, if the Director requires additional time in order to deal with the submission of materials, information, briefing, public comments or responses to public comments, within such extended time as is set by the

Director, the Director shall issue his or her decision. The dispute shall be resolved according to the discretion of the Director. The Director's decision shall be binding on all parties.

- (e) Exhaustion of this dispute resolution process shall not be a prerequisite to the initiation, prosecution or conclusion of any criminal or civil enforcement action brought by the AA, the District Attorney or the State pursuant to Sections 25540, 25540.5, 25541, 25541.3, 25541.5 of the HSC or any other provision of law.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25534.05(a)(3), Health and Safety Code.

Section 2780.2 Administering Agency Performance Standards.

Each AA shall comply with the regulations adopted in this chapter, unless OES assumes authority pursuant to Section 2780.6(e)(3).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533(d) and 25534.05(e), Health and Safety Code.

Section 2780.3 Maintenance of Administering Agency Authorization and Reporting.

In assessing the performance of an AA, OES shall consider the following:

- (a) Effectiveness of the AA program to ensure stationary source participation.
- (b) Effectiveness of the procedures for records management.
- (c) Type and amount of technical assistance provided to stationary sources.
- (d) Stationary source inspections which are conducted to ensure compliance with this program.
- (e) The AA process for public participation.
- (f) Other required program elements necessary to implement and manage this program.
- (g) Comments from interested parties regarding the effectiveness of the local program that raise public safety issues.
- (h) The impact of the CalARP in reducing/eliminating significant releases.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25533(e), Health and Safety Code.

Section 2780.4 Coordination with the Unified Program.

OES shall consider the standards under Section 2780.3 to support OES recommendations to the Secretary of the California Environmental Protection Agency (Cal/EPA) regarding local agency certification for the Unified Program pursuant to Section 25404.3 of HSC.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25404.3, Health and Safety Code.

Section 2780.5 Performance Audit Submission.

- (a) Beginning in fiscal year 1998 (July 1, 1998 - June 30, 1999), the AA shall annually conduct an audit of its activities to implement this program.
- (b) An audit report shall be compiled annually based upon the previous fiscal year's activities and shall contain a brief description of how the AA is meeting the requirements of the program as listed in Section 2780.3.
- (c) The audit report shall be submitted to the Secretary of Cal/EPA on or before September 30 of each year and shall include all of the information required by Section 2780.5(d).
- (d) In addition to the executive summary for each stationary source, pursuant to Section 2745.2, the audit report shall contain:
 - (1) A listing of all stationary sources covered by the program and which facilities:
 - (A) have been audited ,
 - (B) have been requested to develop RMPs and the status,
 - (C) have been inspected, or
 - (D) have received public comments.
 - (2) A list of new or modified stationary sources since the last program audit. The registration information in Section 2740.1 shall also be submitted for each of these facilities.
 - (3) Updated registration information pursuant to Section 2740.1(c).
 - (4) Legal enforcement actions initiated by the AA identifying each stationary source and California Code section alleged to have been violated. This shall include administrative, civil, and criminal actions.
 - (5) Total penalties assessed as a result of enforcement.

- (6) Total fees, service charges, and other assessments collected specifically for the support of this program.
- (7) Total personnel years utilized by the jurisdiction to directly implement, administer or operate this program.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25533(e), Health and Safety Code.

Section 2780.6 Administering Agency Performance Evaluations.

After reviewing information available pursuant to Sections 2780.3 and 2780.5, OES may make a determination that an AA is not taking reasonable action to enforce the provisions of this program. Upon this determination, OES shall initiate the following process:

- (a) OES shall issue a written Preliminary Notice of Program Inadequacy and provide rationale for the notice to the AA, and its local governing body OES shall serve the Secretary of Cal/EPA with this notice and rationale.
- (b) The AA shall have 60 calendar days from date of the Notice in which to: (1) appeal and submit documentation in support of the appeal or, (2) submit a proposed improvement program agreement which identifies how the AA will correct the inadequacies. OES shall review the proposed agreement and request necessary modifications. The agreement shall be finalized within 30 days of its submittal.
- (c) OES, in consultation with the Secretary of Cal/EPA, shall do one the following:
 - (1) If the AA has made a sufficient showing in its appeal, or if OES has entered into an improvement program agreement with the AA, OES shall withdraw the Preliminary Notice of Program Inadequacy ,and notify the AA, or
 - (2) If the AA has neither made a sufficient showing in its appeal nor entered into an improvement program agreement with OES, the Director OES shall hold a public hearing on the subject of program inadequacy. The hearing shall be conducted in the jurisdiction submitting the appeal. Notice of the public hearing shall be published in a local newspaper.
- (d) The AA or its governing body shall have 30 calendar days from the public hearing to respond to OES regarding the comments presented at the hearing.
- (e) OES shall review the response and the public hearing comments. Based upon this review and after consulting with the Secretary of Cal/EPA, OES shall do one of the following:
 - (1) Approve the continued implementation of this program by AA, or
 - (2) Enter into an improvement program agreement with the AA to ensure implementation of this chapter, or

- (3) OES shall assume the authority to exercise the powers of the AA as necessary to implement Article 2 of Chapter 6.95 of the Health and Safety Code, and notify the AA and its governing body of the decision.
- (f) If OES assumes authority pursuant to section (e)(3), the AA shall provide all relevant records to OES upon request.
- (g) The results of the appeal shall be available to the public.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533(e) and (f), Health and Safety Code.

Section 2780.7 OES Authority.

Nothing in this Chapter shall limit the authority of OES pursuant to Health and Safety Code Section 25533(f).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533, 25540.5, 25541.3, and 25543, Health and Safety Code.

Article 11. Technical Assistance

2785.1 Technical Assistance.

Section 2785.1 Technical Assistance

- (a) Stationary sources shall closely coordinate with the AA or OES to ensure that appropriate technical standards are applied to the implementation of this chapter.
- (b) Stationary sources shall request assistance from the AA when necessary to address compliance with this chapter or safety issues regarding unfamiliar processes.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25534.05(a)(5), 25534.5, and 25535(a), Health and Safety Code.

Appendix A to Title 19, Division 2, Chapter 4, Subchapter 1

Table of Toxic Endpoints

[As defined in Section 2750.2 of this chapter]

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
107-02-8	Acrolein [2-Propenal]	0.0011
107-13-1	Acrylonitrile [2-Propenenitrile]	0.076
814-68-6	Acrylyl chloride[2-Propenoylchloride]	0.00090
107-18-6	Allyl alcohol [2-Propen-1-ol]	0.036
107-11-9	Allylamine [2-Propen-1-amine]	0.0032
7664-41-7	Ammonia (anhydrous)	0.14
7664-41-7	Ammonia (conc 20% or greater)	0.14
7784-34-1	Arsenous trichloride	0.010
7784-42-1	Arsine	0.0019
10294-34-5	Boron trichloride [Borane, trichloro-]	0.010
7637-07-2	Boron trifluoride [Borane, trifluoro-]	0.028
353-42-4	Boron trifluoride compound with methyl ether (1:1)	
	[Boron, trifluoro[oxybis[methane]]-, T-4	0.023
7726-95-6	Bromine	0.0065
75-15-0	Carbon disulfide	0.16
7782-50-5	Chlorine	0.0087
10049-04-4	Chlorine dioxide [Chlorine oxide (ClO ₂)]	0.0028
67-66-3	Chloroform [Methane, trichloro-]	0.49
542-88-1	Chloromethyl ether [Methane, oxybis[chloro-]	0.00025
107-30-2	Chloromethyl methyl ether [Methane, chloromethoxy-]	0.0018
4170-30-3	Crotonaldehyde [2-Butenal]	0.029
123-73-9	Crotonaldehyde, (E)-, [2-Butenal, (E)-]	0.029
506-77-4	Cyanogen chloride	0.030
108-91-8	Cyclohexylamine [Cyclohexanamine]	0.16
19287-45-7	Diborane	0.0011
75-78-5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	0.026
57-14-7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	0.012
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)-]	0.076
107-15-3	Ethylenediamine [1,2-Ethanediamine]	0.49
151-56-4	Ethyleneimine [Aziridine]	0.018
75-21-8	Ethylene oxide [Oxirane]	0.090
7782-41-4	Fluorine	0.0039
50-00-0	Formaldehyde (solution)	0.012
110-00-9	Furan	0.0012
302-01-2	Hydrazine	0.011
7647-01-0	Hydrochloric acid (conc 30% or greater)	0.030
74-90-8	Hydrocyanic acid	0.011
7647-01-0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	0.030
7664-39-3	Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) [Hydrofluoric acid]	0.016
7783-07-5	Hydrogen selenide	0.00066
7783-06-4	Hydrogen sulfide	0.042

Appendix A to Title 19, Division 2, Chapter 4, Subchapter 1

Table of Toxic Endpoints

[As defined in Section 2750.2 of this chapter]

(Continued)

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
13463-40-6	Iron, pentacarbonyl-[Iron carbonyl (Fe(CO) ₅), (TB-5-11)-]	0.00044
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	0.14
108-23-6	Isopropyl chloroformate [Carbonochloride acid, 1-methylethyl ester]	0.10
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	0.0027
74-87-3	Methyl chloride [Methane, chloro-]	0.82
79-22-1	Methyl chloroformate [Carbonochloridic acid, methylester]	0.0019
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	0.0094
624-83-9	Methyl isocyanate [Methane, isocyanato-]	0.0012
74-93-1	Methyl mercaptan [Methanethiol]	0.049
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	0.085
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	0.085
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	0.018
13463-39-3	Nickel carbonyl	0.00067
7697-37-2	Nitric acid (conc 80% or greater)	0.026
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	0.031
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide]	0.010
79-21-0	Peracetic acid [Ethaneperoxoic acid]	0.0045
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	0.0076
75-44-5	Phosgene [Carbonic dichloride]	0.00081
7803-51-2	Phosphine	0.0035
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	0.0030
7719-12-2	Phosphorus trichloride [Phosphorous trichloride]	0.028
110-89-4	Piperidine	0.022
107-12-0	Propionitrile	0.0037
109-61-5	Propyl chloroformate [Carbonochloridic acid, propylester]	0.010
75-55-8	Propyleneimine [Aziridine, 2-methyl-]	0.12
75-56-9	Propylene oxide [Oxirane, methyl-]	0.59
7446-09-5	Sulfur dioxide (anhydrous)	0.0078
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF ₄), (T-4)-]	0.0092
7446-11-9	Sulfur trioxide	0.010
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	0.0040
509-14-8	Tetranitromethane [Methane, tetranitro-]	0.0040
7750-45-0	Titanium tetrachloride [Titanium chloride (TiCl ₄) (T-4)-]	0.020
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-]	0.0070
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-]	0.0070
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-]	0.0070
75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	0.050
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	0.26